MANIPLE TO COHORT: AN EXAMINATION OF MILITARY
INNOVATION AND REFORM IN THE ROMAN REPUBLIC

A thesis presented to the Faculty of the U.S. Army
Command and General Staff College in partial
fulfillment of the requirements for the
degree

MASTER OF MILITARY ART AND SCIENCE
Military History

by

BENJAMIN J. NAGY, MAJOR, US ARMY
B.S., University of Idaho, Moscow, Idaho, 2003

Fort Leavenworth, Kansas
2014-01

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. REPORT DATE (DD-MM-YYYY)	2. REPORT TYPE	3. DATES COVERED (From - To)
13-06-2014	Master's Thesis	AUG 2013 – JUN 2014

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
Maniple to Cohort: An Examination of Military Innovation and Reform in the Roman Republic	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)	5d. PROJECT NUMBER
Major Benjmain John Nagy	5e. TASK NUMBER
	5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)	8. PERFORMING ORG REPORT NUMBER
U.S. Army Command and General Staff College ATTN: ATZL-SWD-GD Fort Leavenworth, KS 66027-2301	

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION / AVAILABILITY STATEMENT
Approved for Public Release; Distribution is Unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

Gaius Marius changed the Roman army in 105 B.C.E. These changes were instrumental in changing the military system. Marius took a citizen militia force and slowly transitioned it into a professional army. Crisis, political power, and military experience allowed Marius to change the military system. Marius created a modular soldier capable of completing various tasks to meet any new threat. This modular soldier system became the basis of Roman military organization for the next 300 years.

This thesis argues that professional armies rather than citizen militia forces are more successful on the battlefield. Furthermore, it concludes that instituting military change is a complex problem requiring the right contributing factors for implementation. Finally, the thesis analyzes current issues facing the U.S. Army as it struggles to find a balance between the National Guard, regular forces, and preparing for the next war.

15. SUBJECT TERMS
History, Military Change, Roman Army, Case Studies

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			19b. PHONE NUMBER (include area code)
(U)	(U)	(U)	(U)	128	

Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std. Z39.18

MASTER OF MILITARY ART AND SCIENCE

THESIS APPROVAL PAGE

Name of Candidate: Major Benjamin John Nagy

Thesis Title: Maniple to Cohort: An Examination of Military Innovation and Reform in
                  the Roman Republic

Approved by:

_____, Thesis Committee Chair
Gregory S. Hospodor, Ph.D.

_____, Member
David P. Goebel, M.A., M.M.A.S.

_____, Member
LTC Christopher J. Heatherly, M.M.A.S.

Accepted this 13th day of June 2014 by:

_____, Director, Graduate Degree Programs
Robert F. Baumann, Ph.D.

The opinions and conclusions expressed herein are those of the student author and do not
necessarily represent the views of the U.S. Army Command and General Staff College or
any other governmental agency. (References to this study should include the foregoing
statement.)

ABSTRACT

MANIPLE TO COHORT: AN EXAMINATION OF MILITARY INNOVATION AND REFORM IN THE ROMAN REPUBLIC, MAJ Benjamin John Nagy, 128 pages.

Gaius Marius changed the Roman army in 105 B.C.E. These changes were instrumental in changing the military system. Marius took a citizen militia force and slowly transitioned it into a professional army. Crisis, political power, and military experience allowed Marius to change the military system. Marius created a modular soldier capable of completing various tasks to meet any new threat. This modular soldier system became the basis of Roman military organization for the next 300 years.

This thesis argues that professional armies rather than citizen militia forces are more successful on the battlefield. Furthermore, it concludes that instituting military change is a complex problem requiring the right contributing factors for implementation. Finally, the thesis analyzes current issues facing the U.S. Army as it struggles to find a balance between the National Guard, regular forces, and preparing for the next war.

ACKNOWLEDGMENTS

TABLE OF CONTENTS

ILLUSTRATIONS

TABLES

CHAPTER 1

INTRODUCTION

On the 6th of October 105 BC, two armies met on a field along the Rhone River near the town of Arusio in current-day southern France.[1] On one side were two armies of 80,000 Roman citizen-militia led by two generals, Quntus Caepio and Gnaius Mallius. Facing them was a coalition of tribal warriors estimated at 300,000 strong and commanded by unknown tribal chieftains that threatened the borders of the Roman Empire.[2] Both armies had their own unique types of equipment, organization, tactics, and fighting styles. Despite the disparity in manpower, the Romans were confident in their numbers and their unique fighting organization known as the "maniple system." As both armies maneuvered towards each other and clashed in the epic struggle of combat, a large contingent of tribal warriors overwhelmed the army of Consul Caepio. As the tribal warriors encircled the fleeing Roman army, panic spread through the ranks of Consul Mallius army leading to a rout. The barbarians pursued the fleeing Romans up to the banks of the Rhone River, cutting off their retreat, and slaughtered them.[3]

Historians estimate that 80,000 Romans and 40,000 camp followers perished on that October day.[4] By comparison, the coalition of tribes suffered only minimal casualties

---

[1]Gareth C. Sampson, *The Crisis of Rome* (South Yorkshire: Pen and Sword, 2010), 134.

[2]Ibid., 52.

[3]Ibid., 135.

[4]Livy, "Livy: Perichae 66-70," http://www.livius.org/li-ln/livy/periochae/periochae066.html#67 (accessed May 1, 2014).

and was still fully capable of attacking the Italian Peninsula. Although the tribal army did not push further into Italy, Rome stood defenseless and open to attack. Fear spread through the Roman Senate and amongst the people. The destruction of the army at Arusio and Rome's heavy losses in the wars in Gaul, Macedon, and Africa proved a catalyst for the change in the Roman army.[5]

Cauis Marius, a general and politician of the Roman Republic, both led the reform movement and received credit for it.[6] He became the architect of the drastic changes that transformed the primary unit of the Roman military, namely the legion. These changes are known as the Marian reforms. These reforms allowed the Roman state to conquer the entire Mediterranean basin, and create an empire stretching from current day Portugal to the Rhine River, Persia, and North Africa.

The purpose of this thesis is to examine both the causes and process of the Marian reforms and to assess their effectiveness on the battlefield. Fundamentally, one question rests at its core, "How do militaries effectively change?"—a question no less relevant today than it was during Cauis Marius' time. More specifically what was the current military system, and what changes were implemented? How did the transformation of the Roman military take place? What was the role of Marius, and how did he succeed in pushing his program forward despite formidable opposition? How successful were the reforms, and what role did the reforms play in the success of the Roman military? Furthermore, how did the Roman military continue to innovate and change as the empire grew? An examination of Cauis Marius' career illuminates the complex process of

---

[5]Andrian Goldsworthy, *Roman Warfare* (London: Cassell, 2000), 104-105.

[6]Chris McNab, *The Roman Army* (New York: Metro Books, 2013), 85.

instituting military reform in a republic, while using various case studies of both systems in various battles allows us to compare and contrast the effectiveness of the manipular and cohort systems during the expeditionary campaigns of Rome.

This thesis will examine these questions through analysis of primary sources supported by secondary sources. Chapter 2 will focus on both the maniple and cohort legions, specifically looking at the organization and implementation of these systems. Additionally, chapter 2 will look at the life of Caius Marius, focusing on his upbringing and his rise to power that allowed him to implement changes both politically and militarily.

Chapter 3 comprises comparative case studies from the Punic Wars and the Jugurthine War under the maniple system. These case studies will examine battles from both campaigns specifically looking at the advantages and disadvantages of the citizen militia organization through the maniple system. Additionally, the chapter will focus upon the tactics, implementation, and the functionality of the maniple against asymmetrical and phalanx-style warfare.

Chapter 4 focuses on case studies from the Gallic Wars approximately 50 years after Marius's reforms transitioned the maniple to the cohort. This section will examine the advantages and disadvantages of a professional army using only a single type of infantry soldier against multiple types of enemies. Additional research will focus on how the cohort's tactics implementation and changes to address changing situations.

The thesis' final chapter will discuss the findings of the second, third, and fourth chapters specifically comparing and contrasting how these systems arrayed and how each

system functioned. Additionally, it will assess how Marius implemented change based

upon crisis and his unique influence on the political and military systems.

CHAPTER 2

THE MANIPLE AND COHORT

AND THE CHANGE

In order to understand how the Marian reforms changed the Roman Army we must first look at the army prior to revision. The training, equipment, and recruitment prior to the reforms consisted of a system known as the manipular legion. In addition, we will examine the reforms, their implementation, and Gauis Marius, whose rise to power allowed him to implement changes in the standing system. Examination of the cohort legion after the reforms focused on the training, equipment, and recruitment will allow determine what exactly changed in the cohort. To explore this aspect of Roman history, the author relied upon primary sources, namely the historians Polybius, Sallust, Cicero, and Flavius Vegetius Renatus, all of whom were historians during the use of the system. The author also consulted secondary sources, modern historians concur with much of my interpretation of the primary sources.[7] The conclusions found in this paper are primarily from the primary sources; however, secondary sources are used in confirming findings.

---

[7]McNab, *The Roman Army*; Stephen Dando Collins, *Legions of Rome* (New York: St. Martin's Press, 2010); Sampson, *Crisis in Rome*; Jon Heggie, "Rome's War Machine," *National Geographic* (Fall 2011); Adrian Goldsworthy, *In the Name of Rome: The Men Who Won the Roman Empire* (Great Britian: Weidenfeld and Nicolson, 2003); Christopher Anthony Matthew, *On the Wings of Eagles: The Reforms of Gaius Marius and the Creation of Rome's First Profession Soldier* (Cambridge Scholars Publishing, 2010); Peter Wells, *The Battle that Stopped Rome* (New York: Norton and Company, 2004).

The Manipular System

Originally established around 400 B.C.E. under the "Servian Reforms,"[8] the manipular system established requirements for service based on social standing, personal finance, and age. This system was unique in its recruitment process, limiting enlistment in the army to Roman citizens of demonstrated financial means. Roman soldiers were not professionals, but men who served in the army as a duty to the republic.[9] Polybius states "once a year consuls announce[d] the day that all Romans of military age must report for enrollment."[10] Age and financial holdings determined a citizen's placement in one of the army's five categories through *Dilectus*.[11] According to Polybius, a citizen had to have a minimum net worth of 400 *drachmae* (Roman currency) or 4,000 asses in order to be eligible for service. Citizens whose personal wealth fell below the required amount served as naval oarsmen.[12] The Roman Senate considered peasants unreliable due to having no lands or any financial interest in the preservation of the Republic. Thus, requiring citizens to have some financial holdings gave the soldiers a stake in the preservation of the Roman state or so the reasoning went.

---

[8]Nic Fields, *Roman Battle Tactics 390-110 BC* (Oxford: Osprey Publishing, 2011), 14, 19.

[9]Goldsworthy, *In the Name of Rome*, 29.

[10]Polybius, *The Histories (BC 200-118),* trans. Robin Waterfield, vol. 6 (New York: Oxford University Press, 2010), 385.

[11]The Roman military selection process.

[12]Polybius, *The Rise of the Roman Empire,* trans. Ian Scott Kilvert (London: Penguin Books, 1979), 318.

6

Many primary sources mention the *Dilectus* or selection process. However, the information assessing the net worth for each class conflicts. The overall value for each class surely did not remain the same for 300 years (until the time of Marius and his reforms). Livy's account is consistent with other authors on the first four classes; but the 5th class's entry requirement varies from source to source.[13] This could be due to inflation or a need for additional manpower, which resulted in a lowered entry requirement.

Table 1.   Comparative of Enrollment by Primary Sources

Author	Livy	Polybius
1st Class	100,000	100,000
2nd Class	75,000	no reference
3rd Class	50,000	no reference
4th Class	25,000	no reference
5th Class	11,000	4,000

Source: Christopher Anthony Matthew, *On the Wings of Eagles: The Reforms of Gaius Marius and the Creation of Rome's First Profession Soldier* (Cambridge Scholars Publishing, 2010), 13, 15.

The selected soldiers were initially required to serve for an overall term of 16 years as an infantryman or 10 years as a cavalryman before reaching the age of 46.[14] Upon completing an initial term of six years of active service, soldiers were then required to serve the remaining 10 years during times of war; and then only for the duration of a campaign. The system aimed to use the soldiers only when needed (that is, in a reserve

---

[13]Matthew, *On the Wings of Eagles*, 12-13.

[14]Polybius, *Rise of the Roman Empire*, 318.

capacity), and not on a regular basis, which ensured that soldiers could return home and manage their businesses, farms, and assets. All this facilitated economic stability in Rome proper. Vegetius best captured the essence of the idea of the citizen-soldier when he said, "The same man was both soldier and farmer, but a farmer who, when occasion arose, laid aside his tools and put on the sword."[15] Raising troops in this manner had a military effect. Thus, we see military operations of usually of short duration, revolving around planting and harvesting seasons so as to be able to utilize the *evocati* or veterans. However, in times of national emergency, soldiers' terms of service could be extended to twenty years or for the duration of the campaign.[16]

Organization

After the Servian reforms, there were four military classes in the Roman military system: *velites* (skirmish infantry), *hastati* (light infantry), *principes* (medium infantry), and *triarii* (heavy infantry). Citizens selected for service were placed in units according to age and financial standing. The *velites* included young poor men, age 16 to 20, whereas the *hastati* included men age 20 to 25.[17] The *principes* comprised wealthier men of any age who could afford better equipment. The most experienced and older men from the *evocati* found themselves in the *triarii,* the final class of the manipular system.[18]

---

[15]Flavius Vegetius Renatus, *The Military Institutions of the Romans*, Book I, trans. LT John Clarke (Mansfield Centre, CT: Martino Publishing, 2011), 3.

[16]Polybius, *Rise of the Roman Empire*, 319.

[17]Ibid., 320.

[18]Ibid.

Velites served as light infantry and often in a skirmish capacity. They wore a cloth tunic without armor and carried a small round wooden shield known as a *parma* along with several javelins.[19] The *velites* primary duty was to harass and disrupt the enemy force with javelins before it made contact with the main body. Once the enemy force closed on the *velites*, they would retreat to the rear of the maniple formation.[20]

Hastati were medium infantry equipped with a large oval shaped shield known as a *scutum* and wore either a solid metal plate (*pectoral*) or some sort of mail shirt for protection. Additionally, they were equipped with two different types of javelins, a heavy one and a smaller lighter. Range from the enemy determined the javelin used. The *hasati* formed the first line of infantry with the *velites* skirmishers in front.[21]

The *principes* were the next most experienced soldiers and the best equipped in the manipular army. Their equipment consisted of the *scutum*, a single *pila* (spear*)*, *gladius* (short sword), *lorica* (armored shirt), and greaves to cover their legs. *Principes* formed the second line in the manipular legion, supporting the *hasati*, with their primary focus being close quarters combat.[22]

Forming the final lines of the manipular army was the *triarii*. Consisting of veterans (*evocati*) in their late 30s to 40s, *triarii* were equipped with a *gladius*, *lorica*,

---

[19]Ibid.

[20]Fields, *Roman Battle Tactics 390-110 BC*, 30.

[21]Polybius, *Rise of the Roman Empire,* 321.

[22]Ibid.

long thrusting spear (*hastate*), large *scutum*, and a small dagger (*pugio*). In battle, *triarii* anchored the formation and served as a ready reserve during battle.[23]
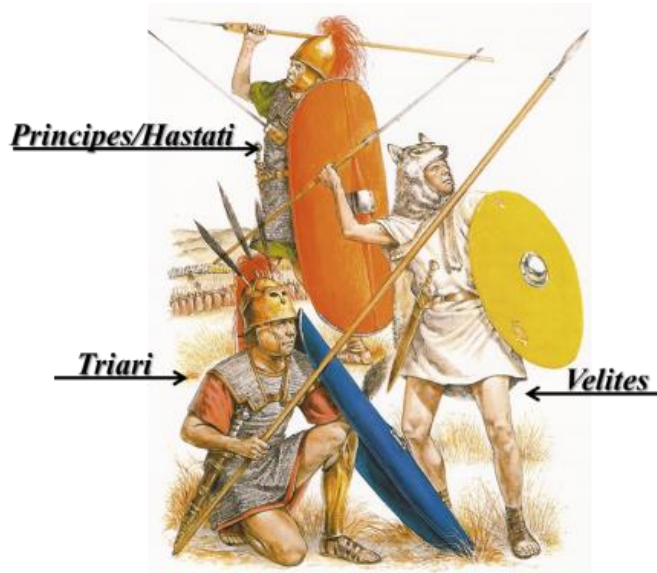
Figure 1.   Soldiers of the Maniple

Source: Chris McNab, *The Roman Army* (New York: Metro Books, 2013), 48.

The command structure under the manipular system consisted of two senatorial electors, who commanded on alternating days. This system ensured that no one general would gain control of the army and turn it on Rome. The Roman Republic went to considerable lengths to control its military commanders. Not only were they selected by the Senate, they were also regulated by popular vote and served terms.[24]

---

[23]Ibid.

[24]Polybius, *Rise of the Roman Empire,* 268.

Within the maniple itself, the number of soldiers dictated leadership organization. *Hastati* and *principes* consisted of 120 soldiers, each divided into two *centuries* of 60 soldiers. A centurion commanded each century with assistance from four subordinate leaders. The *optimo* acted as a second in command and was responsible for discipline in the century. The centurion maneuvered the century using the s*ignifier* (standard bearer) and a *tubicen* or *cornicen* (bugler). The *tessarius* acted as the camp guard commander and was responsible for posting of sentries.[25]
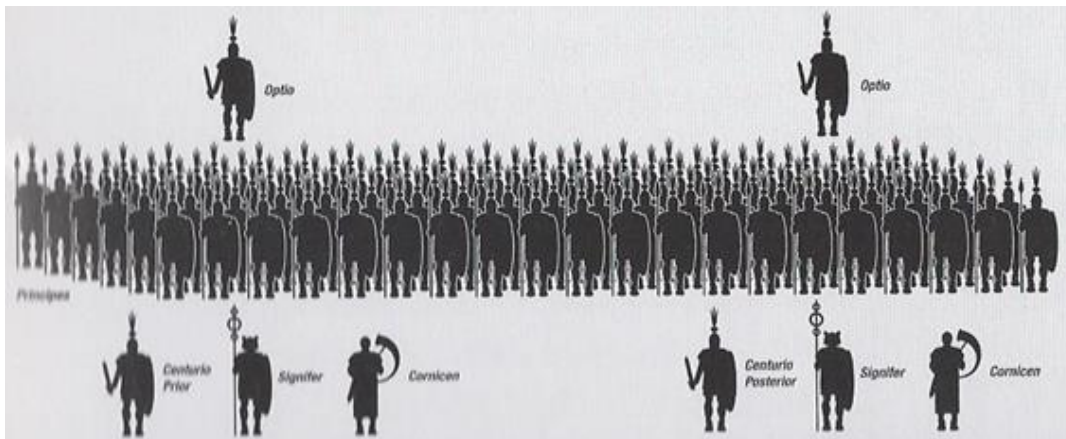
Figure 2.   Standard Maniple

Source: Chris McNab, *The Roman Army* (New York: Metro Books, 2013), 33.

Roman cavalry (*equites*) consisted of the 300 wealthiest noblemen armed with nothing more than a thin spear and small shield early in the Republican period. After the war in Greece, the Romans adapted Greek armor to fit the cavalry's needs. This consisted

_____

[25]Adrian Goldsworthy, *The Complete Roman Army* (London: Thames and Hudson, 2003), 27.

of a round Greek-style shield and a lance with metal tip and butt-spike.[26] *Equites* comprised ten sub-units, known as *turma*, of approximately 30 cavalry each. The *turma* further subdivided into groups of 10n. *Decuriones* commanded each unit; the *decurione* answered to a *preafectus* who held overall command of the unit.[27]

After the war in Greece, the Romans had adapted the Greek armor to fit the cavalry needs. This consisted of a round Greek style shield and a lance consisting of a spear tip and a metal spike on the bottom. Cavalry played a reconnaissance role on the march and operated as a mobile unit during combat that could arrive on the flank of enemy forces, dismount, and fight as infantry if necessary.[28]

<div align="center">Tactics and Implmentation</div>

The three ranks of infantry in a legion comprised 1200 *hastati*, 1200 *principes*, 600 *triarii,* and 300 cavalry with the remainder of the 4200 consisting of *velites*. In the event that the legion exceeded 4,200 soldiers, the *hasati* and *principes* would be supplemented while the *triarii* remained at 600.[29] Primary sources are unclear about why the number of *triarii* remained fixed at 600 soldiers. However, it could be due to constant warfare and the associated loss of able-bodied men. During emergencies, legions might exceed 4,200 but only with approval from the Senate.[30]

---

[26]Polybius, *Rise of the Roman Empire,* 321.

[27]Fields, *Roman Battle Tactics 390-110 BC*, 35.

[28]Polybius, *The Histories*, 389.

[29]Polybius, *Rise of the Roman Empire,* 321.

[30]Goldsworthy, *The Complete Roman Army*, 28.

But how did units form for battle? The legion formed a battle line with the *hasati* in front in *maniple*s (or units) consisting of 120 soldiers. This line would continue across the front rank leaving space between each *maniple*. The second rank of *principes* formed in the same fashion, offsetting their *maniple* to cover the gaps in the first rank while providing space between the front rank and the second rank.[31] The third rank of *triarii* was broken down into *maniples* of 60 men and offset in the same fashion (Reference diagram 19). This formation created three solid lines of infantry and was the standard Roman battle formation known as the *triple acies.*[32]

Velites fought in a skirmish capacity moving in front of the *triple acies. Velites* carried various types of *pilum* used to disrupt the enemy as it approached the main Roman lines. The theory behind this tactic was to harass the enemy by disrupting the cohesion of the approaching enemy force, depleting some of their numbers, and penetrating enemy shields to render them useless. As the enemy closed with the main lines, the *velites* would withdraw to the rear of the formation through the gaps left by the *maniples* to allow the heavy infantry to melee with the enemy.[33]

---

[31]Ibid., 26-28.

[32]Fields, *Roman Battle Tactics 390-110 BC*, 41-42.

[33]Ibid., 30.

Manipilar Battle Formation triple acies

Triari

Principes

Hastati

Velites
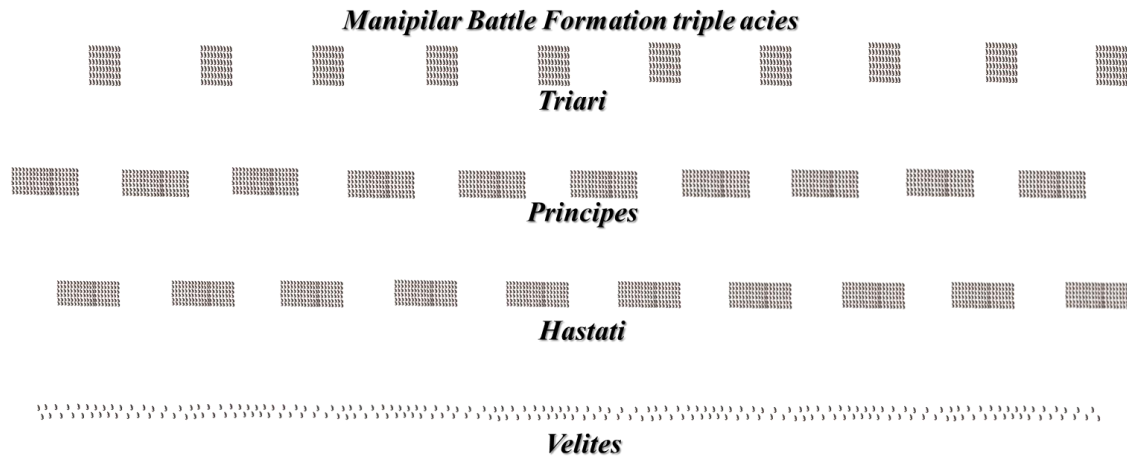
Figure 3.   Standard Maniple Battle Formation

Source: Nic Fields, *Roman Battle Tactics 390-110 BC* (Oxford: Osprey Publishing, 2011), 42. Author's recreation.

By design, both the *hastati* and *principes* fought in close quarters combat. Roman methods of fighting consisted of each man employing individual movements to defend his body with his *scutum* and use his sword for both cutting and thrusting.[34] For these tactics to work, soldiers required a substantial amount of space between each other in the formation. A soldier needed at least three feet in front and back to function effectively.[35] This space allowed the soldier to swing his *gladius* freely and to maneuver his shield to parry incoming blows. Once the *hastati* closed with the enemy, the *principes* moved forward to fill the gaps, with the *triarii* remaining in a reserve capacity.[36] Polybius noted that in this formation an individual soldier faced one or two opponents at a given time.[37]

---

[34]Polybius, *Rise of the Roman Empire*, 511.

[35]Ibid., 321.

[36]Fields, *Roman Battle Tactics 390-110 BC*, 42.

[37]Polybius, *Rise of the Roman Empire*, 511.

14

Ideally, the *principes* and *hastati* would push the enemy back able to collapse the enemy flanks forcing them to route or surround them. These maneuvers could only be successful if the Romans were able to fight on favorable terrain and the enemy fought in the Greek style phalanx formation.

Figure 4.   Spacing of Maniple Soldiers

Source: Wikipedia, "Maniple," http://en.wikipedia.org/wiki/Maniple_(military_ unit)#mediaviewer/File:Roman_Maniple_Spacing.png (accessed January 12, 2014).

Gauis Marius

Gauis Marius was the driving force behind the change in the Roman army from the maniple system to that of the cohort. To understand how and why these changes came about it is necessary to look at the man himself, his upbringing and his political and military experiences. Primary consulted for this section consisted of Plutarch, Pliny the

Elder, and Sallust; each source provided insight on Gauis Marius's climb to power and his implementation of changes. Again secondary sources were used to confirm the findings and conclusions.[38]

Marius was born in 157 B.C.E to a lower class family in Cirrhaeaton, a village near Arpinum (modern day Arpino) on the central Italian Peninsula. According to Plutarch, "he was born of parents altogether obscure and indigent, who supported themselves by their daily labor."[39] This implies that his parents were farmers placing Marius in one of the lower social class categories. His poor upbringing gave him a personality considered by noble Romans of the time as "rude and unrefined, yet temperate and conformable to the Roman severity."[40]

As a junior officer, Marius garnered significant military experience under some of Rome's greatest generals. He first served with Scipio[41] in 134 B.C.E. as a military tribune during the war against the Celtiberians and at the siege of Numantia (central Spain).[42] During this campaign, he distinguished himself as a great soldier and leader, earning many different honors to include (most likely) the silver cup for defeating an enemy in

---

[38]McNab, *The Roman Army*; Dando Collins, *Legions of Rome*; Sampson, *Crisis in Rome*; Heggie, "Romes War Machine"; Goldsworthy, *In the Name of Rome*; Matthew, *On the Wings of Eagles*; Wells, *The Battle that Stopped Rome.*

[39]Plutarch, *Lives 75*, trans. A. C. E. Dryden, vol I (New York: 2001), 549.

[40]Ibid., 550.

[41]Scipio Africanis the younger, Consul credited with the capturing of Carthage, Iberia, and Numantia.

[42]Plutarch, *Lives*, 1:550.

single combat.[43] It was here that Scipio himself was rumored to have told Marius to aspire towards a political career.[44] A friend asked Scipio "after you where should Rome obtain another such general?" Scipio responded by clasping Marius on the shoulder and replying "here perhaps."[45]

Figure 5.   Conflicts during the Age of Marius

Source: Author's conception of Roman Empire based on Adrian Goldsworthy, *Roman Warfare* (London: Cassell, 2000), 88-89.

Plutarch identified this incident as the inspiration for Marius's political career. Marius sought the backing and assistance of Caecilius Metellus from a family allied with

---

[43]Ibid., 550.

[44]Ibid.

[45]Ibid.

Marius's. With Metellus's support, Marius achieved the office of tribune of the people.[46]

While tribune, Marius's reputation rose because he put forward a popular regulation regarding voting that lessened the authority of the courts of justice. A rival senator who declared the bill against the law challenged Marius. In response, Marius disputed his argument, and, the bill finally passed for the betterment of the people. The people of the lower classes henceforth esteemed Marius as a man of undaunted courage and assurance, as well as a vigorous critic of the aristocratic senate.[47]

In 114 B.C.E., Marius left the praetorship and traveled to current day Spain, where he cleared vital land routes of bandits and robbers.[48] His reputation grew in Spain, and he became powerful and politically popular there. Marius rose to the status of Nuevo Homo or "New Man" meaning he was not an aristocrat, but a common man who rose from the ranks. As a "New Man," Marius positioned himself for further success by allying with local aristocrats such as Consul Quintus Metellus. Marius's change in status allowed him to marry Julia from the honorable family of the *Julii* of the Caesars.[49] This union with a child of an influential family solidified his political career.

In 109 B.C.E., Marius went back to war, this time with the Numidian's during the Jugurthine War in North Africa. Marius served as a legate (commander of a maniple legion) under Consul Quintus Metellus (relative of Caecilius Metellus), who had a

---

[46]Ibid., 550.

[47]Ibid.

[48]Ibid., 551.

[49]Ibid.

reputation as a harsh man with an unblemished reputation.[50] Serving under Metellus at the Battle of Zama (around 108 B.C.E), he again distinguished himself by saving the camp from a surprise Numidian attack while the army was engaged in battle, preventing the destruction of Metellus army.[51] Word of his actions reached Rome, and Marius became a hero in an unpopular war.[52]

In Utica (Tunisia), Marius, who already possessed a strong desire to run for political office, received further inspiration from a soothsayer who told him that he was destined for "great and marvelous things."[53] Marius reputation as a soldier had already secured him a position as the plebian tribune (tribune of the people). As such, he "was not known by his face but for his deeds and elected by the tribes."[54] Marius's fame gave him everything he needed to run for political office except an ancient family lineage. He compensated, in part, for this deficiency by marrying into the *Juilii* family. Marius enjoyed an abundance of everything required of a Roman politician of this era— "industry, probity, soldiering, temperance, unconquered by riches, and hungry for glory."[55]

---

[50]Sallust, *Catiline's War, The Jugurthine War*, *Histories*, trans. A. J. Woodman (London: Penguin Books, 2007), 85-87.

[51]Ibid., 96.

[52]Goldsworthy, *In the Name of Rome*, 133.

[53]Sallust, *Catiline's War, The Jugurthine War*, 99.

[54]Ibid.

[55]Ibid.

Marius's final hurdle to political aspiration was the *status quo* of the time.

Typically, the consulship of Rome passed from noble family to noble family. At first,

Marius did not wish to pursue the consulship itself, but desired a low-level magistrate

position.[56] When he approached Metellus about his desire to leave the army and pursue

political office, Metellus told him "not [to] embark on anything misguided or to hold

ideas above your station."[57] Metellus assured Marius he could leave after his official

duties were completed. Metellus's remarks and political ambitions for his own son

angered Marius. Thus began the political rift between the two friends.

According to Sallust, this was the beginning of Marius's anti-Metellus campaign

and his move to take control of the Jugurthine War; Marius "refrained from no word or

deed provided it served his ambition."[58] Marius continued to stand out from other officers

and used his military fame to slander Metellus at every opportunity. Furthermore, he

continually used his political connections to exemplify his deeds and criticize anything

done by Metellus.[59]

Marius spoke out boldly against Metellus's inability to capture Jugurtha, arguing

that he would have captured Jurgurtha long ago with an army half the size of that Rome

provided Metellus. The war dragged on due to the Jugurthians' defensive strategy, which

---

[56]Ibid., 100.

[57]Ibid.

[58]Ibid., 101.

[59]Goldsworthy, *In the Name of Rome*, 134.

20

forced the Romans to conduct a series of long sieges. The long sieges and scarce victories added to the resentment of the war in Rome and to the calls for a swift end.[60]

Marius used this resentment to conduct a smear campaign against Metellus. With the war already unpopular, his slanderous remarks seemed convincing as the war continued to deplete Rome's coffers and caused financial hardship for businessmen in both Africa and Rome. Meanwhile, Marius continued to petition Romans in Africa to gather support for his election. Appealing to local businessmen and veteran soldiers hopes for an end to the war, Marius persuaded them to pressure their connections in Rome[61] to "attack Metellus in harsh terms."[62]

Metellus could no longer withstand the verbal and political slander instigated by Marius and his followers back in Rome. In 107 B.C.E., Metellus released Marius from his duties and allowed him to return to Rome to run for political office. Marius set sail for Rome and used his political connections to campaign for him while he travelled.[63]

When Marius returned to Rome, the people hailed him as a hero. His humble upbringing and the glory he had gained in the Jugurthine War made him a hero to the lower classes. Marius passed new political reforms that changed the election criteria, nobility were no longer guaranteed political position.[64] The law opened up new political opportunities to lower social classes and broadened the number and type of positions they

---

[60]Ibid.

[61]Ibid., 133.

[62]Sallust, *Catiline's War, The Jugurthine War*, 102.

[63]Plutarch, *Lives,* 553.

[64]Ibid., 550.

21

could hold. Marius's endorsements from prominent Romans, popularity with the lower classes, and the new political reforms solidified Marius status as a political contender.[65]

Marius gave exceptional speeches focused on his humble upbringings, which appealed to the lower classes. He spoke out against the corruption of the Senate, and used his valor and military accomplishments to bolster his standing.

> I know Citizens that it is not with the same qualities that the majority seeks command from you and after acquiring it, exercises it at first restrained and then they live a life of apathy and haughtiness. In my case all my hopes rest in myself, and it is necessary to safeguard them by prowess and blamelessness: other things lack the strength. Faces of all are turned towards me, that the nobility is looking for a chance to attack but from boyhood to this point in my life has been that I regard all toil and danger as normal. In my case which has spent all my life in the best practices, good deeds have now become second nature through habit. Compare their haughtiness, citizens with myself as a new man: the things which they are accustomed to hear or read, I have either seen or done personally. Now consider whether deeds or words are worth more? They are contemptuous of my newness impugned for my status.[66]

According to Adrian Goldsworthy, the speeches used in Sallust's *The Jugurthine War* are factual only in general tone and attitude and not the actual words. Like the example above, Marius's speeches focused on the poorer population and were critical of the Senate.[67] They served their purpose, continuing to increase his popularity with the lower classes.

In 107 B.C.E., Marius used his fame as a "new man" and anti-government agenda to solidify his position. The result was election as a consul. The Senate charged Consul Marius to raise reinforcements and to take command of Metellus's army in Numidia.

---

[65]Sallust, *Catiline's War, The Jugurthine War*, 101.

[66]Ibid., 114-115.

[67]Sallust, *Catiline's War, The Jugurthine War*, 114-115; Goldsworthy, *In The Name of Rome*, 13.7.

Marius raised forces by breaking down social barriers and violating the norms of the Servian Reforms.[68] According to Plutarch, "Marius proceeded to levy soldiers contrary both to law and custom, enlisting slaves and poor people."[69]

The same year Marius arrived in Africa with his new recruits and assumed command of Metellus's army, he began conducting offensive operations against Jugurtha. Marius defeated a succession of armies that fought asymmetrically, and strove to isolate Jugurtha from supplies. His plan worked. Sallust attests to the baneful effect of the loss of the town of Caspa and other supporting cities on Jurgurtha.[70] The losses forced Jugurtha to turn to his allies for help, specifically Bocchus, his father-in-law. Bocchus and Jugurtha's armies combined to attack Marius with hit-and-run tactics as he headed for winter quarters they were soundly defeated, effectively ending Jugurtha's military power.[71]

In 105 B.C.E., Sulla, Marius's subordinate brought the Jugurthine War to an end. Sulla convinced Jugurtha's ally and father-in-law, Bocchus, to betray him. Bocchus switched allegiance to Rome and surrendered Jugurtha to him.[72] Sulla received due credit for the capture of Jugurtha. Fame is fickle, and, as Sulla's star rose, Marius's dimmed. As Plutarch put it, "many that envied Marius attributed the success wholly to Sulla."[73]

---

[68]Sallust, *Catiline's War, The Jugurthine War*, 118.

[69]Plutarch, *Lives,* 1:553.

[70]Sallust, *Catiline's War, The Jugurthine War*, 126.

[71]Ibid., 128.

[72]Plutarch, *Lives,* 554.

[73]Ibid.

Marius responded to the challenge by claiming that it was his war and only finished by Sulla.[74] The victory was Marius by right of having participated in the campaign the longest and him setting it up for final victory. Still, there is no denying that Marius's political career and the fame that it was based upon became jeopardized by not being the one that apprehended Jugurtha. Marius was determined and continued to look for opportunities to continue his climb up Rome's political ladder.[75]

Fortunately, fate was kind, presenting Marius with an opportunity to counteract his decline. This occurred in 105 B.C.E when the Germanic tribes approached Rome from the west.[76] According to Plutarch, "Jugurtha's apprehension was only just known when the news of the Teutones and Cimbri began."[77] The threat from the west and the yet unknown exploits of Sulla led to the second election of Marius as Consul. Marius was still in Africa when elected.[78] Plutarch described the unique aspects of Marius's election: "The Romans, being from all parts alarmed with this news [Teutons/Cimbri] sent for Marius to undertake the war, and nominated him second time consul [sic], though the law did not permit anyone that was absent or that had not waited a certain time after his first consulship to be again created but the people rejected all opposers."[79] Marius election demonstrates the depth of his popularity with the people of Rome, especially as it came

---

[74]Ibid.

[75]Ibid., 554-555.

[76]Ibid., 554.

[77]Ibid., 555.

[78]Ibid., 554-55.

[79]Ibid., 556.

over in the face of capable competition. This mattered because, in Republican Rome, popularity meant power.

In 105 B.C.E., the Germanic tribes of the Teutoni and the Cimbri moved into Roman provinces, destroying three consular armies and spreading terror throughout Rome. Marius, being a hero of the people and of the Jugurthine War, was selected to lead the army that was to rectify the situation. Marius moved his legions from Africa to Rome in preparation for the move into northern Italy. The Germanic tribes moved towards Iberia (present-day Spain) to pillage the unprotected provinces there instead of facing the formidable army assembling in Rome. Marius used this breathing space wisely by making modifications to his army in preparation for the impending showdown with the Germanic tribes.[80]

Marius carefully trained his army by conducting long marches with heavy loads that focused on enhancing the stamina of his troops. Eventually, the training enabled soldiers to carry loads without complaining over distances of 25 miles or longer in a single day. Marius did not stop there. He reorganized the army's baggage train by making each soldier carry his own equipment and food.[81] This modification along with the Roman soldiers' new-found stamina is presumably where the term "Marius's Mules" came from. The changes had a profound operational effect, because they allowed the army to move quicker and farther than was previously possible. An enemy that expected the Romans to move at their normally encumbered rate of march were in for a surprise.

---

[80]Ibid., 557.

[81]Ibid.

Marius modified the weaponry carried as well by altering the *pilum* (javelin). He ordered that the two iron pins holding the metal spearhead to the wooden base removed. One of the iron pins was replaced with a weakened wood substitute designed to snap upon impact. The new *pilum* would bend into an "L" after being thrown, rendering it useless until repaired. This had important tactical effects. It prevented the *pilum* from being picked up and thrown back at the Romans. Additionally, when a *pilum* penetrated a shield, it would drag upon the ground rendering the shield useless for defense.[82]

Valerius Maximus claims that Marius also introduced specialized advanced swordsmanship training; "No general before him had done this, but [he] summoned the masters of gladiators from Scaurus' school and introduced to our legions a more accurate way of parrying and inflicting blows."[83] Gladiators were renowned as experts with different types of weapons, and their expertise provided the seasonal soldiers that comprised the bulk of Marius's army to receive advance training in swordsmanship. The payoff was that the army became experts at killing in close combat.

Gaius Marius also established the eagle as the exclusive symbol of the Roman legion. Initially, it could only be found in the first rank and had no primacy over any other standard. The legion contained other standards; however, over time, the eagle became the unofficial symbol of the legion because of its being the standard carried into battle. Marius made this state of affairs official by abolishing the other four standards

---

[82]Ibid., 565.

[83]Geoffrey Parker, *The Cambridge History of Warfare* (New York: Cambridge University Press, 2005), 52.

(minotaur, wolf, horse, and the wild boar).[84] It should be said, that there is no clear evidence about why the eagle was chosen, however, the historian Livy said that the eagle was a symbol favored by Marius himself.[85]

Marius also changed the standard fighting formations. As previously related, Polybius refers to the open-formation-fighting of the individual soldier—standard practice in the maniple was to leave space between each soldier to allow room to conduct hand to hand. Marius clearly modified this formation when fighting the Germanic tribes by placing his soldiers in close order, with joining shields to maximize protection against enemy blows. Marius also ordered his legions to stand their ground and to throw their *pilums* before engaging in close combat in order to disrupt the enemy. Only then were formations to use their swords.[86] This is the first mention of a close formation of locked shields.

Marius's second and third consulship expired while he waited for the Germanic Tribes to move back into northern Italy. Although Marius was opposed by other candidates during his elections, he continued to play on his modest upbringing and his "new man" status in order to secure the necessary votes. His election for these additional terms was due, according to Plutarch, to "the people being unwilling to trust their fortunes with any other general but him."[87]

---

[84]Pliny the Elder, *The Natural History*, John Bostock, M.D., F.R.S. H.T. Riley, Esq., B.A. London. Taylor and Francis, Red Lion Court, Fleet Street, 1855.

[85]Plutarch, *Lives*, 575.

[86]Ibid., 563.

[87]Ibid., 557-558.

On July 30th 101 B.C.E., the German tribes finally returned to northern Italy looking for new lands to conquer and settle in. Consul Catulus's army, after being defeated, retreated to join forces with Marius in the hope of stopping the German tribes from sacking Rome itself. Battle commenced on the Raudian Plain (Vercellae) with approximately 52,000 Romans and allied troops against 180,000-200,000 tribesmen.[88] Plutarch describes the casualties at the battle as over 60,000 tribesmen captured and a projected 120,000 slain.[89] Florus gives more detail stating that 65,000 tribesmen fell while the Romans suffered less than 300 casualties.[90] Even with the possibility of inflated numbers from the battle, Gareth Sampson concurs with my analysis of the numbers could be high due to a number of civilians being caught up in the hand to hand fighting.[91]

Marius played an instrumental role in the changing of the maniple system. Marius personal experience in previous conflicts allowed him to study the failures and constraints of the maniple system to implement changes. His rise in the political arena and the support from the lower class allowed him to make the changes with little or no opposition. Marius then solidified his implemented changes by defeating the Cimbri with minimal casualties, thus proving these new reforms were successful and spurring change throughout the standing Roman system. The result of his influence and change was the first stage in transitioning the maniple into the cohort legion.

---

[88]Sampson, *The Crisis in of Rome*, 170.

[89]Plutarch, *Lives*, 566.

[90]Sampson, *The Crisis in of Rome*, 174.

[91]Ibid., 161.

The Cohort Legion

This section focuses on how the changes implemented by Marius were the baseline for reforms that transformed the Roman army. We will explore what further reforms took place and the implementation of the new cohort legion, as well as its structuring, equipping, and training.

Under the cohort system, units levied by Rome were no longer selected under the "Servian Reform" policy; now soldiers were volunteers or draftees from all over the Roman Republic. A legionary's term of service was a minimum of 25 years; being a legionary was, then, a professional, full-time career rather than a part-time required obligation of citizenship. Manpower came from mainly the lower classes or local tradesmen such as blacksmiths, cobblers, and carpenters, were usually men that sought a better life or were friendly foreigners seeking Roman citizenship.[92] Approval to join the legion required a medical inspection. Good eyesight, broad shoulders, a thin waist, flexible legs and tough feet were desired physical capabilities in potential soldiers.[93] After medical examination, soldiers swore an oath (*sacramentum*) to the Republic, and later the emperor, and attested to their willingness to obey commands and to sacrifice their life for Rome.[94]

Roman cavalry under the cohort system consisted of 120 to 300 soldiers recruited from within the legion with little significant change to their task and purpose under the

_____

[92]Flavius Vegetius Renatus, *The Military Institutions of the Romans*, Book I, 3.

[93]Ibid.

[94]Heggie, "Rome's War Machine," 35.

manipular legion.[95] Reconnaissance and skirmishing remained the purpose of cavalry; horses also allowed cavalrymen to move rapidly and forage for supplies. However, as time progressed Roman commanders came to rely on auxiliary cavalry comprised of foreign troops that were better equipped than their Roman counterparts and more experienced at mounted combat. Horsemanship was not popular in Rome. Thus, many poor citizens did not know how to ride or fight from horseback unlike Gallic and Germanic tribesmen.[96]

Legionaries under the cohort system carried standardized equipment. Each soldier carried a modified large body shield (*scutum*), which was now squared on the ends instead of rounded and contained a solid metal center (*boss*). The legionary protected his body with armor consisting of a chainmail shirt (*lorica*) designed to protect against cutting blows. A steel helmet (*galea*) protected the top part of the skull and curved downwards to protect the back of the neck. Additionally, the helmet consisted of two hinged cheek guards to protect against glancing blows to the face. The legionary's primary weapon became the sword (*gladius*), designed primarily for stabbing opponents.[97] Javelin's (*pilum)* maintained their initial purpose of bombarding the enemy to disrupt their advance, but now were limited to two to four carried by each soldier. Additionally, each legionary carried a small dagger (*pugio*) on his belt as a weapon of last resort.

---

[95]Wells, *The Battle That Stopped Rome*, 96.

[96]McNab, *The Roman Army*, 91-92.

[97]Flavius Vegetius Renatus, *The Military Institutions of the Romans*, Book I, 10.
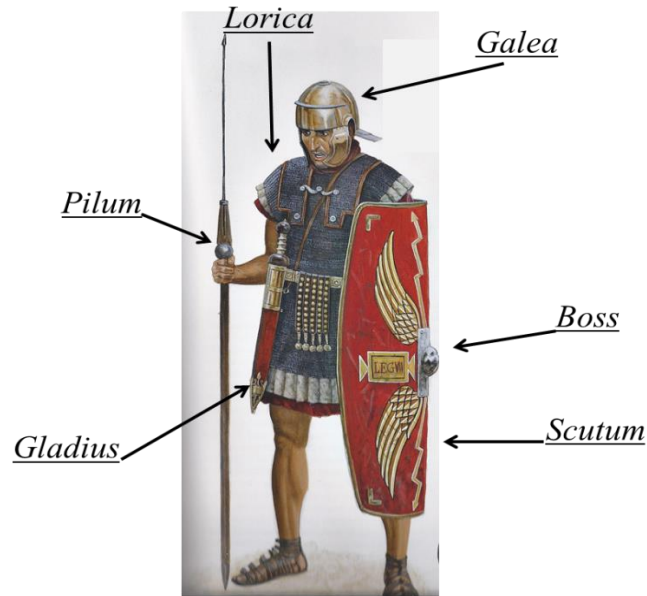
Figure 6.   Roman Cohort Legionary

Source: Ross Cowan, *Roman Legionary AD 69-161* (Long Island City, NY: Osprey Publishing, 2013), 41.

Organization

Legionaries served in an eight-man unit known as a *contuberinum*, which was similar to today's modern infantry squad. Each *contuberinum* selected their "representative" by vote, and this individual would handle any administrative issues within the squad. A century consisted of eighty men comprising 10 *contuberinum*s. Centurions led each century, and he selected a standard-bearer (*signifier*) for the unit. The Centurion rose from the ranks, a man identified as being educated, brave, and loyal to the legion.[98]

---

[98]Heggie, "Rome's War Machine," 34.

A cohort consisted of six centuries. Cohorts had the ability to operate independently and conduct small-scale operations. Within the cohorts, individual centuries might also be assigned independent missions or remain combined to form a solid formation.[99] The cohort was the basic building block of the legion. Ten cohorts formed a legion, numbering of around 5,000 soldiers.[100]

The cohort-based legions gradually integrated auxiliaries on a permanent basis. Tribes or cultures considered "friends of Rome" were armed and equipped similar to the cohorts themselves but not to the extent of the legionaries. Auxiliaries drilled and trained in the movements, formations, and standard battle tactics of the Romans, and initially maintained their cultural integrity with lower-level units led by native leaders. Over time, the auxiliary units mixed with others from across the empire to prevent them turning on the legion as happened in the Teutoburg Forrest in 9 A.D.E.[101] A Roman officer (Prefect) led the auxiliaries and charged with training, maintaining, and disciplining them.[102]

Auxiliaries assumed the skirmish mission traditionally done by the *velites*. With the abolishment of the class system, skirmishers were not recruited from within. Legionaries, being multi-purpose soldiers, could skirmish if necessary, but auxiliaries were better equipped to accomplish and especially skilled to execute the task. Most auxiliaries were from tribal communities and had some experience in using a bow or

---

[99]Ibid.

[100]Wells, *The Battle That Stopped Rome*, 95.

[101]Flavius Vegetius Renatus, *The Military Institutions of the Romans*, Book II, trans, LT John Clarke (Mansfield Centre, CT: Martino Publishing, 2011), 2.

[102]Heggie, "Rome's War Machine," 34.

sling, making them invaluable as skirmishers.[103] The Roman Army recognized the great utility of skirmishers, but did not focus any resources to the creation of their own Roman special-purpose troops for the job.[104]

The cohort legion was a professional standing organization, as opposed to the seasonal, semi-professional nature of the manipular legion. The reason for this was, of course, that full-time soldiering meant that time not spent fighting was spent training. Thus, the training and organization of the cohorts became the key for a typical Roman battle, one in which a small, highly-trained force confronted a larger, but undisciplined enemy. Vegetius (4th century Roman historian for the Emperor) claimed "Victory in war does not depend entirely upon numbers or mere courage; only skill and discipline will insure it."[105] The key here was a rigorous and detailed training system derived from the example implemented by Marius. Although he did not create the cohort system, it is clear that Marius certainly started Rome down the road toward it.

Rome decided that the lower classes were the most fit to become soldiers because of their inherent toughness and rugged upbringing. The life of a peasant consisted of carrying heavy burdens, working long hours, forgoing food, and enduring fatigue.[106] Some legionaries were specifically recruited because of the civilian skills they provided to the Legion. Blacksmiths, carpenters, butchers, and huntsmen were the most sought

---

[103]Dando-Collins, *Legions of Rome*, 50-51.

[104]McNab, *The Roman Army*, 91-92.

[105]Flavius Vegetius Renatus, *The Military Institutions of the Romans*, Book I, 1.

[106]Ibid., 2.

after recruits.[107] Integration of these recruits with special skills allowed for the Legion to become more self-sufficient in maintaining while on campaign.

Once the selection of recruits was finalized and medical evaluations completed the training began. Formations and marching was the first portion of training and seen by the Romans as the most vital. Roman scholars attribute the importance of marching drill as the primary foundation of the cohort; understanding that the break in formation jeopardizes the unit as a whole and not the individual.[108] Mutual support proved a key combat multiplier, making each legionary far more effective than he could ever have been on his own. Here we see the culmination of Marius's initial efforts on the training field.

The second portion of training consisted of use of the *gladius* in hand-to-hand combat. Close combat training consisted of using over-weighted shields and swords to build skill, strength, speed, and endurance.[109] The training focused on thrusting and stabbing an opponent instead of using the cutting edge. The idea was that a stab was far more debilitating than a cut, which was rarely immediately fatal.[110] As with close order drill, Marius implemented this practice while preparing to fight the Cimbri War.

The use of the new cohort legion in battle was an improvement in Roman combined arms warfare. As opposed to the manipular legion, the cohort legion now possessed the flexibility to use many more types of tactical formations. No longer

---

[107]Ibid., 5.

[108]Ibid., 7.

[109]Ibid., 8.

[110]Ibid., 1.

confined to classes and types of troops making up individual ranks, the cohort legion

could maneuver, engage, and commit reserves with standardized units. Battle formations

varied according to the judgment of the commander, but the most common ones were the

simplex acies, consisting of a solid single line, the *duplex acies* of two lines with cohort-

size gaps between each that allowed mutual support, and the *triple acies*, which

comprised three mutually supporting lines. Each formation had its own strengths and

weaknesses. For example, the *duplex acies* and *triple acies* allowed provided greater

flexibility to commanders once engaged because of the greater depth of the formations.

They also enhanced command and control of specific areas of the battlefield by

subordinate commanders and provided the ability to reinforce the line when necessary.

On the other hand, the *simplex acies* maximized combat power to the front.[111] Clearly,

the choice of which formation best suited the situation relied on the legion commander's

assessment of the threat and terrain. The formation of the battle lines allowed command

and control of specific areas of the battlefield by subordinate commanders and the ability

to reinforce the line when necessary.

---

[111]Ibid., 85.

I	II	III	IV	V	VI	VII	VIII	IX	X

VI	VII	VIII	IX	X

DUPLEX ACIES

I	II	III	IV	V

I	II	III	IV

TRIPLE ACIES

V	VI	VII

VIII	IX	X
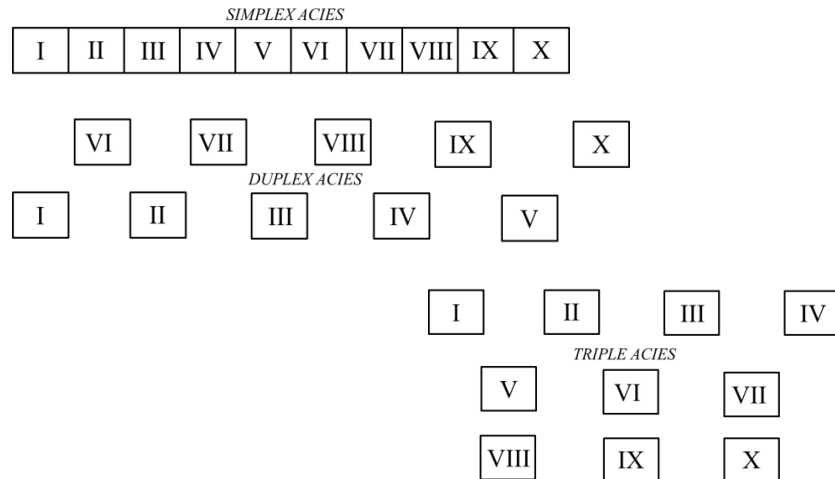
Figure 7.   Roman Cohort Battle Formations

Source: Ross Cowan, *Roman Battle Tactics 109BC-313AD* (Oxford: Osprey Publishing, 2007), 20, 23.

In the cohort system, auxiliary units posted on the far left or right of the legion. It was vital for the legionaries hold the center of any formation. Auxiliary units, as the least reliable, found themselves posted on the flanks where they played an important, but not vital role. The cohort legion could respond to threats to its flanks if the auxiliaries performed poorly, but seldom recovered when the center gave way. Again, flexibility was the word of the day. For example, in the *triple acies*, cohorts in the second and third line could reinforce the auxiliary units in the event that they began to break.[112]

In the cavalry units under the new system, auxiliaries predominated. Roman manpower focused on core strength of the legion, the legionary himself. Cavalry remained a useful, but not essential, branch of the Roman military. Basically, the Roman

---

[112]Flavius Vegetius Renatus, *The Military Institutions of the Romans*, Book II, 2-3.

way of war was infantry-centric. In battle, cavalry was stationed on a flank of the legion

to be used as shock troops, attacking the enemy in the flank or rear if the opportunity

arose or pursuing a fleeing enemy.[113] During foot marches cavalry provided recon and

surveillance along with providing security to the flank and rear of the march formation.[114]

In summary, the changes from maniple to cohort may have been slow to change

initially; however, Marius's changes were the driving force behind the creation of the

cohort. The Roman army became a combined arms force flexible, mobile, and disciplined

in a short period. These changes allowed the Romans to increase their empire across the

Mediterranean and throughout Europe.

<p align="center">Conclusion</p>

This chapter focuses on Roman military reforms from the maniple to the cohort

system, and on the career and role of a key reformer, Gaius Marius. The maniple system

was similar to today's United States National Guard. It provided the Roman state with the

ability quickly to generate competent forces when needed. Once the crisis was over, the

soldiers returned back to their civilian lives until needed again. The maniple system,

despite producing an army of citizen soldiers, prevented a majority of the population

from joining the ranks due to restrictions of the Servian Reforms. Force generation, then,

both reflected and was a product of the Roman political system. The great strength of this

way of generating forces was that it caused minimal disruption to the Roman economy

and produced a force that was intensely loyal to the Roman state. However, training and

---

[113]Ibid., 13.

[114]Julius Caesar, *The Conquest of Gaul*, trans. Rev F. P. Long (New York: Barnes and Nobel Publishing, 2005), 53.

discipline, and thus combat-effectiveness suffered, as they always must when soldiers serve only part-time.

Continual wars and Rome's necessity to protect its borders strained the resources of the system, especially manpower. Gaius Marius recognized the imperative to change. He used his political popularity to institute change within the old system, and because the military system and political systems were so closely intertwined, military reform was, ipso facto, political reform. Marius's popularity, which stemmed from his humble upbringings military fame, provided him with the freedom to do things that were intensely unpopular with some segments of Roman society.

Simply put, Marius's implementation of his reforms was only possible by his incredible popularity. He brought new ideas to the army and furthered existing ones, developing a new kind of training and selection process. The lasting effects of these reforms, seen throughout the primary sources often starting with a small idea that was implemented army-wide.

The cohort legion was a standing, professional army open to all classes of citizens and no longer a citizen militia. Furthermore, it epitomized combined arms during the period. The cohort legionary was a combination of a multipurpose soldier equally skilled on the offensive or the defensive soldier; dangerous in hand-to-hand and from a distance due to the *pilum*. The legionary was then a complete and efficient killing machine rigorously trained for the sole purpose of killing Rome's enemies whoever and wherever they were. The payoff any new system is effectiveness in battle. It is where we now turn to compare and contrast the maniple and the cohort legion in different case studies.

CHAPTER 3

CASE STUDIES OF THE MANIPLE

This chapter will focus on four case studies that explore how the Roman army under the maniple system was operated. Using the Jugurthine War (began 111 B.C.E.) and selected battles from the Punic Wars (specifically between 216 B.C.E. and 202 B.C.E.), it will look at the advantages and disadvantage of the maniple legion. The case studies provide a detailed analysis of the battles of Cannae, Murthal River, Great Plains, and Zama, and, specifically, the system before the reforms implemented by Gauis Marius. The main primary sources are Polybius's, *The Histories* and Sallust's, *The Jugurthine War.* Additionally, secondary sources from Fields, Goldsworthy, Healy, and Sampson provided confirmation on the author's findings.[115]

Second Punic War

The Second Punic War, between the Roman and Carthaginian empires over control of the Mediterranean Sea and Iberia (Spain), began in 218 B.C.E. Expansion by both empires and overlapping claims to land caused political tensions to rise and eventually led to war. The Second Punic War raged across Iberia, Sicily, the Italian Peninsula, and North Africa. The Carthaginians used a traditional Greek-Phalanx-style system consisting of troops drawn from around Africa, Mediterranean and as well as

_____

[115]Goldsworthy, *In the Name of Rome*; Fields, *Roman Battle Tactics 390-110 BC*; Mark Healy, *Cannae 216 Hannibal Smashes Rome's Army* (Oxford: Osprey Publishing, 2005); Sampson, *Crisis in Rome*.

various mercenary forces. Rome used the maniple system derived from the citizen militia developed under the "Servian Reforms."[116]

The Battle of Cannae

The Battle of Cannae (216 B.C.E.) was one of the major Roman defeats during the Second Punic War. Hannibal Barca, leader of the Carthaginian forces, crossed over the Swiss Alps from Iberia (Spain) to wage war in the Roman homeland situated on the Italian Peninsula.[117] Rome sent armies against Hannibal and suffered repeated defeats that resulted in the loss of many soldiers and support from parts of allied southern Italy. In response, the Roman Senate ordered forces to attack the Carthaginians near Cannae to prevent further attacks on vital logistical areas and to decrease growing Carthaginian influence in Rome's southern provinces.[118]

Rome saw Hannibal's invasion as a dire emergency, and increased the size of the legions to 5,000 soldiers (as referenced in chapter 2) and dispatched 40,000 soldiers (eight maniple legions) south. Additionally, 40,000 allied infantry supported the Romans as well as 6,000 allied and Roman cavalry, which brought the total number of soldiers in the army to around 86,000.[119] The Roman Senate elected two Consuls, Lucius Paullus

---

[116]Fields, *Roman Battle Tactics 390-110 BC*, 14, 19.

[117]Polybuis, *The Rise of the Roman Empire*, 223.

[118]Healy, *Cannae 216 B.C.*, 12.

[119]Polybuis, *The Rise of the Roman Empire*, 274.

and Terentius Varro, to share command of the army on alternating days (as referenced in chapter 2).[120]

Rome did not wish to lose another battle to Hannibal, nor could they afford to do so as allied states were beginning to waver in support. The Senate reasoned that the Roman armies continually lost to Hannibal's numerically inferior forces because lack of training and experience in the legions. To address this concern, it ordered ex-Consul Servilius to train the legions by "blooding" the Roman soldiers in small battles. Servilius was not to become decisively engaged with the Carthaginians until conditions were favorable. Meanwhile, Paullus continued to recruit forces in Rome until mid-summer when he and Consul Varro arrived to take full command of the army.[121]

Consul Paullus desired force the Hannibal to fight on terrain that minimized the Carthaginians' superior cavalry numbers. On the other hand, Consul Varro focused on using the Romans' numerical superiority, which provided an almost two-to-one advantage over their opponents. Consul Varro became impatient with Paullus's strategy and pushed to end the campaign quickly through brute force. Thus, on his day of command, Varro marched the legions out of the camp and drew up battle lines, intending to force the Carthaginians to fight.[122]

The Roman army used the natural terrain of the Afidus River to anchor their right wing of Roman cavalry and to protect their right flank. The maniples established a long battle line that linked in with the Roman cavalry, but were unable to establish proper

---

[120]Ibid., 268.

[121]Ibid., 266.

[122]Ibid., 270.

spacing between maniples due to the confined space. This lack of space caused the army's frontline to be shorter than its depth, and also created a solid formation of infantry with little room to maneuver. The Italian allied cavalry secured the far left flank of the maniples. To the front, Varro placed a long line of skirmishers (*velites*).[123] In reserve, 10,000 soldiers guarded the camp and, if the opportunity presented itself, were to attack the enemy camp, preventing a Carthaginian escape.[124]
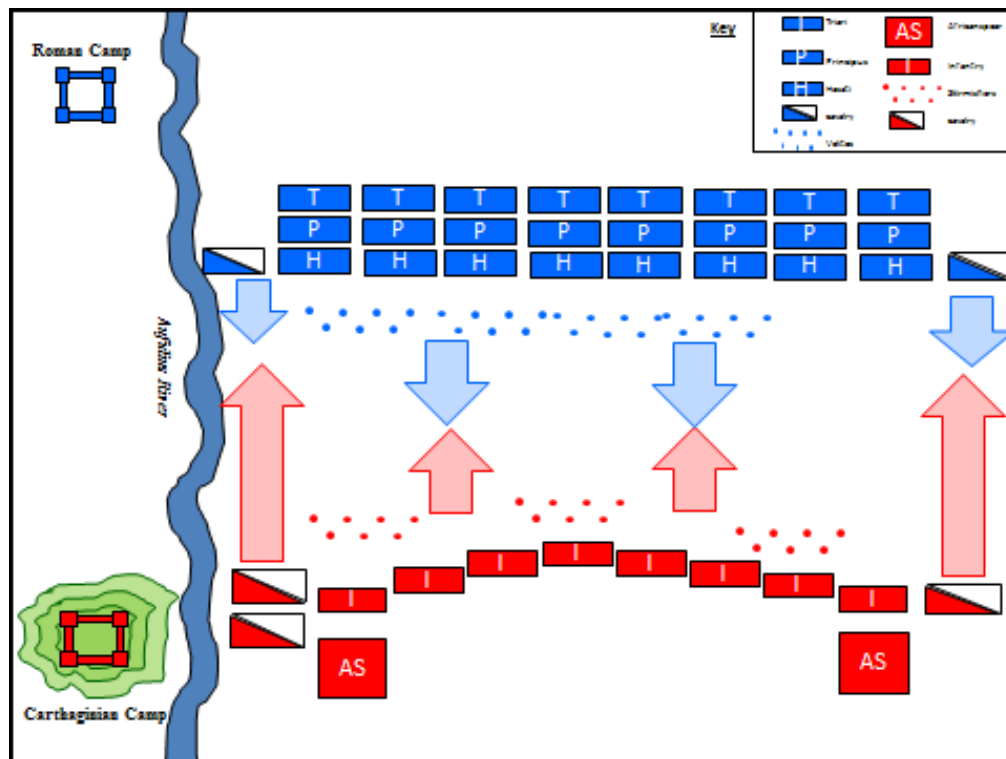

Figure 8.   Cannae Phase 1

Source: Polybuis, *The Rise of the Roman Empire,* tran. by Ian Scott Kilvert (London: Penguin Books, 1979), 271. Author's conception of the battle from this classic work.

---

[123]Ibid.

[124]Ibid., 274.

Hannibal observed the Romans establishing battle formations and quickly prepared his army by consolidating his formations opposite the Roman lines. Hannibal created a line of battle with his 40,000 infantry by placing skirmishers in front and using 10,000 cavalry to secure both of his flanks. The Spanish and Celtic cavalry confronted the Romans closest to the river, while the Numidian cavalry deployed directly across from the Roman allied cavalry. Hannibal created a thin center by keeping his African spearmen (phalanx) in reserve, consolidated near the end of his right and left flanks.[125]

As the armies moved across the battlefield towards each other, skirmishers opened the battle with ranged missile attacks. Hannibal pressed his forces forward and adjusted his army to create a crescent-moon-shaped line with the rounded end forward of the Carthaginian flanks (see figure 8). As the light infantry collided, both sides engaged in hand-to-hand combat. With similar arms and equipment, both sides were evenly matched. Thus, neither side gained a significant advantage over the other, which created a stalemate.[126]

---

[125]Ibid., 271.

[126]Ibid.

Figure 9.   Cannae Phase 2

Source: Polybuis, *The Rise of the Roman Empire,* tran. by Ian Scott Kilvert (London: Penguin Books, 1979), 272. Author's conception of the battle from this classic work.

Meanwhile, the Carthaginian left flank of Spanish and Celtic cavalry clashed with the Roman cavalry near the Afidus River.[127] Horsemen on both sides dismounted and fought in hand-to-hand combat. The superior numbers and experience of the Spanish and Celtic warriors overwhelmed the Roman cavalry forcing them to flee to the river. The Roman cavalry, being dismounted and pinned between the river on their right and the dense formation on the left, had trapped themselves and were systematically cut down.[128]

---

[127]Ibid.

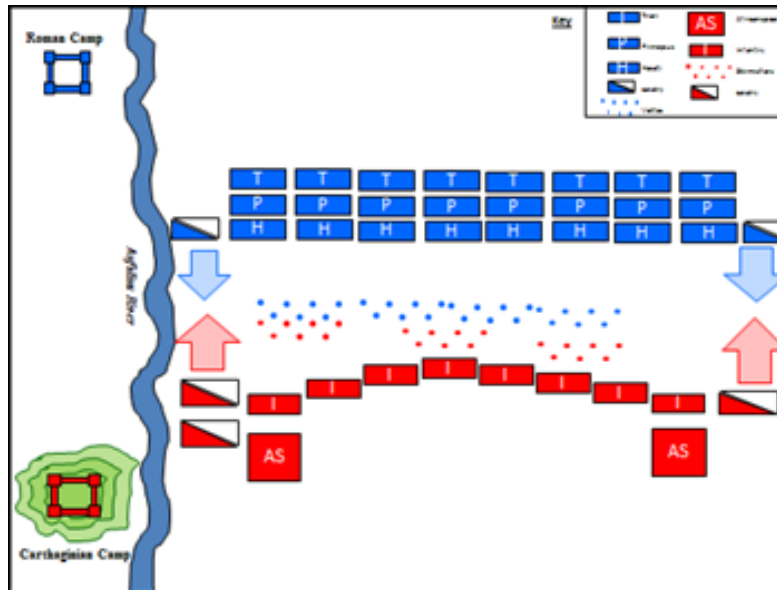[128]Polybuis, *The Rise of the Roman Empire*, 272.

44

Figure 10. Cannae Phase 3

Source: Polybuis, *The Rise of the Roman Empire,* tran. by Ian Scott Kilvert (London: Penguin Books, 1979), 273. Author's conception of the battle from this classic work.

Both formations of infantry continued to fight one another for the upper hand in the center of the battle. The sheer weight of the Roman force, tightly compacted and reinforced, pushed the center, held by Carthage's Celtic allies, backwards, reversing the earlier crescent-shaped formation. The Romans assumed they were seeing the Carthaginian center beginning to waver and surged forward to break the center. As the Romans pushed the Carthaginian center harder, the Celts moved backwards forcing the Romans to encounter more of the Carthaginian line and, thus, a stiffer resistance. Once the center of Carthaginians stalled the forward momentum of the Romans, the Romans

were fully engaged deep in the Carthaginian center with each flank echeloned back (like a shallow V, see figure 11).[129]
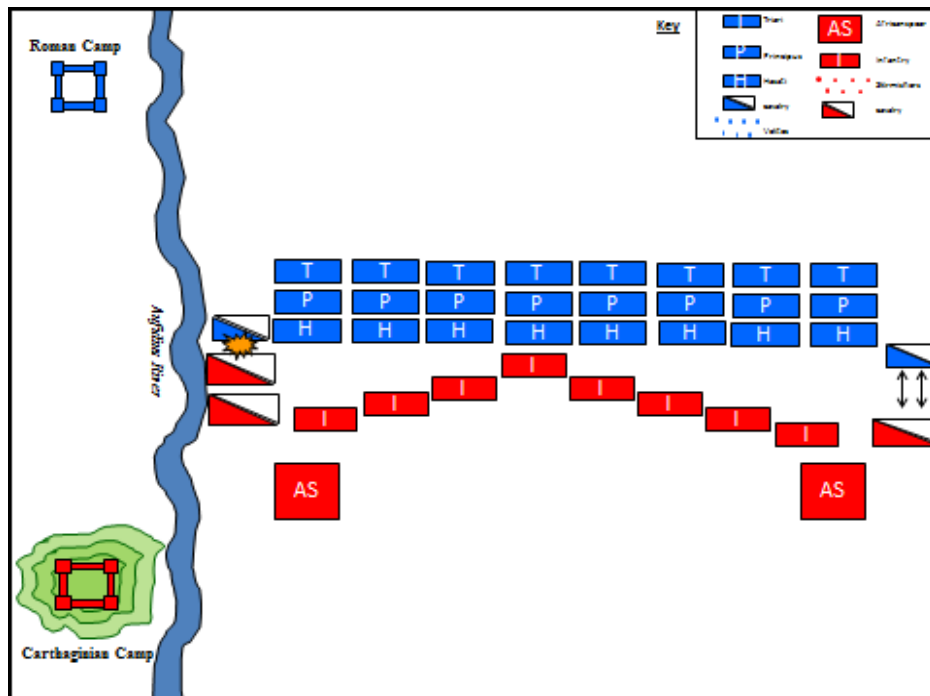

Figure 11. Cannae Phase 4

Source: Polybuis, *The Rise of the Roman Empire,* tran. by Ian Scott Kilvert (London: Penguin Books, 1979), 272. Author's conception of the battle from this classic work.

Hannibal waited for this moment to implement the second phase of his plan. He simultaneously ordered the African spearmen on both flanks to turn inward, form a phalanx, and to attack the sides of the Roman formation. With the Roman cavalry gone and their flanks exposed, the African spearmen moved in to envelop the Roman army. This maneuver and the Romans' tightly packed formation disrupted the cohesion of the

[129]Ibid.

46

maniple, rendering it useless. The Roman infantry now had to fight independently or not at all due to the tightly packed mass of Roman soldiers.[130]
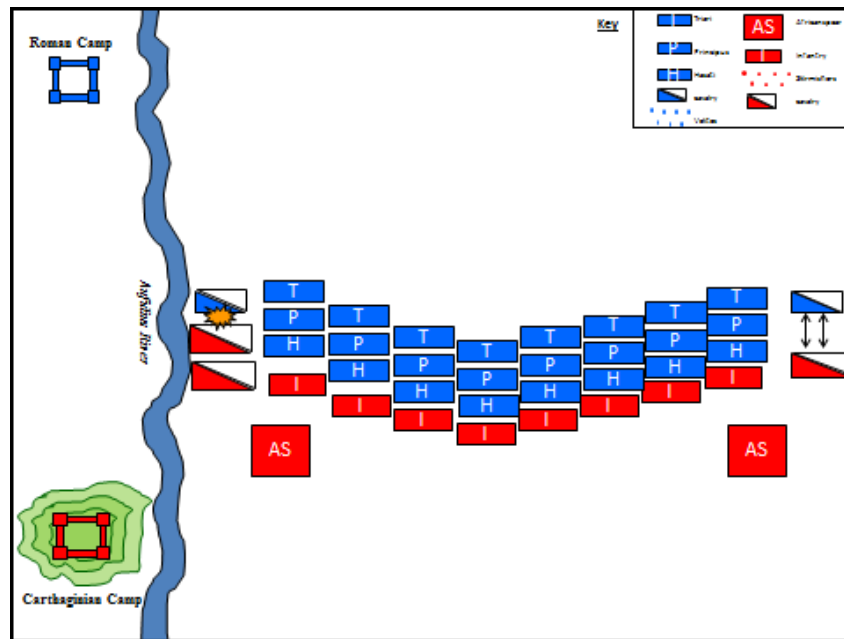

Figure 12. Cannae Phase 5

Source: Polybuis, *The Rise of the Roman Empire,* tran. by Ian Scott Kilvert (London: Penguin Books, 1979), 273. Author's conception of the battle from this classic work.

On the Carthaginian right flank up to this point, the Numidian cavalry disrupted the Italian allied cavalry by pelting them with javelins, but stayed uncommitted to decisive combat. Neither side inflicted major casualties, but the fixing attack prevented the Italians from reinforcing the Roman right or center. Meanwhile, the Carthaginian

---

[130]Polybuis, *The Rise of the Roman Empire*, 272.

cavalry on the Roman right flank had finished destroying the Roman cavalry by the river and now moved to charge the Italian allies. The Italian allies, seeing the Carthaginian cavalry preparing to charge their flank and rear and confronted by the Numidians from the front, fled the field abandoning the Roman infantry.[131]
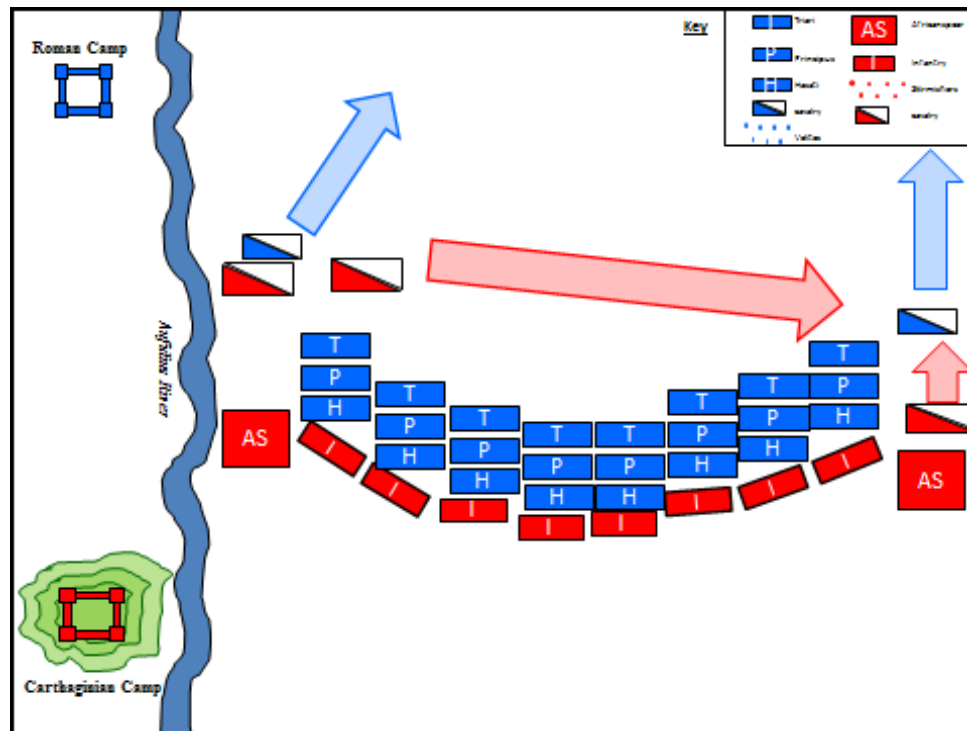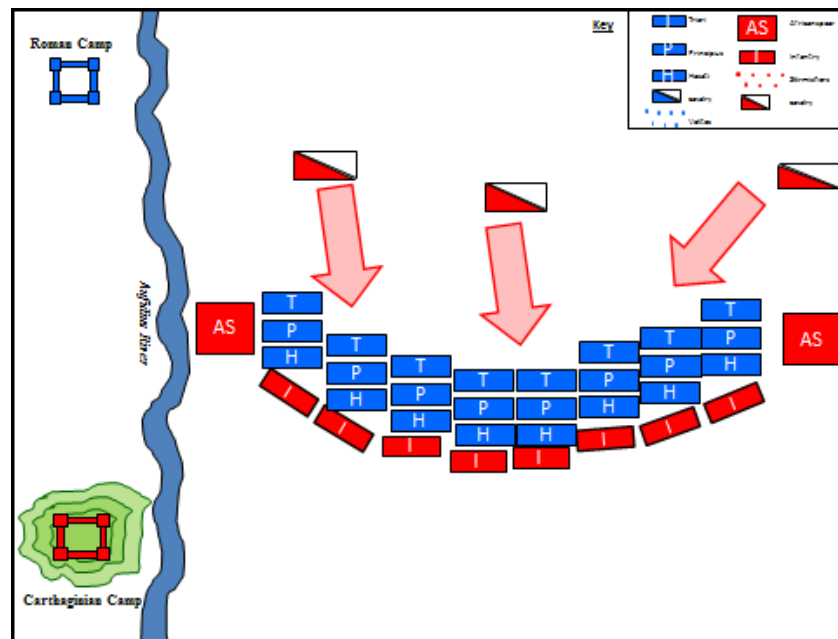

Figure 13. Cannae Phase 6

Source: Polybuis, *The Rise of the Roman Empire,* tran. by Ian Scott Kilvert (London: Penguin Books, 1979), 273. Author's conception of the battle from this classic work.

The Carthaginians now had superior mobility, since all of the Roman cavalry had been destroyed or fled the field. The Carthaginians reformed their cavalry forces and charged the rear of the Roman infantry completely cutting the Romans off from retreat.

---

[131]Ibid., 273.

The Carthaginian infantry, inspired the attack of their cavalry, pressed even harder, causing panic in the Roman lines. The Romans attempted to reform their ranks and assemble some sort of organized defense; however, the tightly packed formation prevented them from doing so. The trapped Romans were then systematically killed.[132]

The battle ended with almost the total annihilation of eight Roman legions. Polybius states that a mere 3,000 Romans escaped from the field. Another 10,000 Roman soldiers, those left behind to guard the Roman camp, also escaped.[133] Historian Mark Healy believes this matches almost precisely the number of *triarii*[134] assigned to the legions. However, this seems wrongheaded. Polybius identified the need for experienced soldiers to defeat Hannibal. Thus, it simply does not make sense to leave the best warriors behind to guard a camp. Healy disputes the casualties documented by Polybius by comparing them to Livy's figures. Livy claims that only 47,000 infantry and 2,700 cavalry died, with 19,300 prisoners.[135] It seems reasonable that between 50,000 to 70,000 Romans were killed on the field of Cannae.

The Carthaginians losses were considerably less and much like the Roman casualties there are discrepancies. Polybius gives specific numbers of 4,000 allied Celts and 1,500 Spaniard's and African's killed in the center, while the cavalry only suffered around 200 horsemen killed.[136] Healy provides Livy's numbers as 8,000 Carthaginians

---

[132]Ibid.

[133]Ibid., 274.

[134]Healy, *Cannae 216 B.C.*, 74, 76.

[135]Ibid., 85.

[136]Polybuis, *The Rise of the Roman Empire,* 274.

49

lost, placing the total loss at around 6,700 to 8,000. Whatever the actual numbers, the figures attest to the one-sided and stunning nature of Carthaginian victory.

The Battle of Cannae was one of the worst defeats the Roman army suffered during the Republican period. This battle is an example of the problems inherent with a citizen militia force that relied the synchronizing of particular of skill sets on the battlefield. When conditions did not allow proper implementation, the results could be catastrophic. Three prominent issues arise from this case study: the misuse of the maniple formation, inferior cavalry, and undisciplined, poorly trained soldiers.

The maniple formation was misused during the Battle of Cannae. The confined space combined with the large force of eight legions prevented the maniple formation from being correctly implemented. The maniple's success depended upon the *triarii, principes, hastati*, and *velites* ability to maneuver and mutually support each other, the unique skill sets blending on the battlefield. The confined space precluded the necessary maneuver space between maniples. This prevented each rank from being properly reinforced and supported. The Carthaginian center tactic of collapsing the center backwards created a broader front and condensed the Roman formation even further.

To fight effectively, Roman soldiers had to break formation to engage the Carthaginians, causing further disruption of the maniple. Within the maniple each soldier required a certain amount of space to use specific weapon systems. The increasingly confined space hindered Roman soldiers from using any of their specific abilities. Once the Carthaginians surrounded the Romans, they created a wall of spears, pushing the Romans back even further upon themselves and preventing them from effectively

retaliating. With a limited ability to fight back and unable to reorganize, the Romans were systematically killed or captured.

Inferior cavalry also proved to be detrimental to the Romans at the Battle of Cannae. The Romans relied on either allied cavalry or *equites* (refer to chapter 2) to fill this role on the battlefield. The Romans considered cavalry roles as skirmishing, reinforcing, screening a flank, or pursuit. They did see cavalry as a significant tactical force in battle. The Carthaginians, on the other hand, used cavalry as a maneuver force during battle, a fixing force or rapid shock troops. The Carthaginian cavalry did both at Cannae, fixing the Italian cavalry on the Roman left and decisively engaging the Roman cavalry on the right. Later, they charged the rear of the Roman infantry. The lack of experienced cavalry soldiers as well as the Romans misperception of the importance of these forces in battle led to the collapse of the Roman flanks. With the loss of the Roman cavalry, the Carthaginians secured superior mobility on the battlefield and not only threatened the Roman rear, but also prevented the Romans from retreating in an organized fashion. The loss of Roman mobility has a direct correlation to the large number of casualties suffered by them. Cavalry remained a shortcoming in the maniple system when not supported by the main infantry force.

Discipline is another cause of the defeat of the Romans at Cannae. The citizen militia force struggled against the Carthaginians forces due to their lack of discipline. The Romans raised additional forces to stop the Carthaginian invasion of the Italian Peninsula after series of defeats. These defeats depleted the number of experienced soldiers and forced Rome to call up new ones or to recall forces under the "Servian Reforms". These new Roman soldiers had little time to train and to prepare as a unit before they were

51

thrown into battle. The Roman generals attempted to have the soldiers gain experience by conducting skirmishes before committing to decisive battle with the Carthaginians. However, not enough of the extremely large force of Roman soldiers was able to gain experience in minor skirmishes. This left a majority of the army inexperienced. Add the lack of experience to the overwhelming number of soldiers on the Roman side and panic was the predictable result once things began to go badly. Once surrounded by the Carthaginians, the result was catastrophe. The Carthaginians were everything that the Romans were not; many previous battles hardened them and familiarized them with fighting in large formations. The Carthaginians' ability to outmaneuver the Romans and to surround them showed just how disciplined they were. Superior discipline allowed them to secure victory. The Carthaginians maintained unit cohesion in their fighting withdrawal in the center. This made the Romans believe that they were winning, and allowed the rest of the Carthaginian army to encircle them. The lack of Roman discipline facilitated the Carthaginian plan as they pushed forward, breaking up the maniple formation and intermixing lines. The Battle of Cannae is as much a triumph of discipline over overwhelming numbers as anything else.

The Battle of Great Plains

Cornelius P. Scipio (Scipio Africanis) began offensive operations against the Carthaginians in 210 B.C.E. by sweeping his army through Iberia and attacking the Carthaginian settlements there. After defeating the Carthaginian forces in Iberia, Scipio moved to Africa with his army to attack the heart of the Carthaginian Empire, its capitol. In Africa, the two major battles between Carthage's Greek-phalanx-style army and the Roman *manipular* army were Great Plains and Zama.

The Battle of Great Plains 203 B.C.E. took place following a successful surprise attack on the Carthaginian and allied Numidian camps. The Carthaginians and Numidians retreated towards the town of Abba and came across a mercenary unit of 4,000 Celtberians mercenaries hired by the Carthaginian government to assist in the war.[137] The reinforcements encouraged Spyanx, the leader of the allied Numidians, to prepare to fight the pursing Roman army. Carthaginian forces led by Hasbudrul arrived and joined the Numidians and Celtberians, bringing the total number of soldiers gathered on the Great Plains region to over 30,000.[138]

Scipio moved his army (unknown size) from Utica to meet the threat on the Great Plains. It took five days for the army to march to the Great Plains, where the Romans camped within four miles of the Carthaginians. For three days, the armies arrayed in battle formation, each waiting for the other to attack. Minor skirmishes took place between each side's cavalry, and each day ended with both armies retiring at day's end. On the fourth day, the battle commenced.[139]

Scipio's Roman army aligned in the traditional formation *triple acies*: a skirmish line of *velites*, followed by the *hasati* making up the second rank, *principus* as the third rank, and the *triari* as the final line (refer to chapter 2). Scipio placed the Italian Cavalry on the right and the Numidian cavalry led by Masinissa, an allied Numidian King, on the left.[140] The Carthaginians and their allies arranged their army in a linear formation across

---

[137]Ibid., 456-457.

[138]Ibid., 459.

[139]Ibid., 460.

[140]Ibid.

from the Romans. The Celtberian mercenaries formed the center directly across from the legion infantry. The Carthaginian cavalry and infantry led by Hasburdul formed on the left across from the Numidians allied with Rome. The allied king Spyanx and his Numidians formed on the Carthaginian right opposite the Italian cavalry.[141]
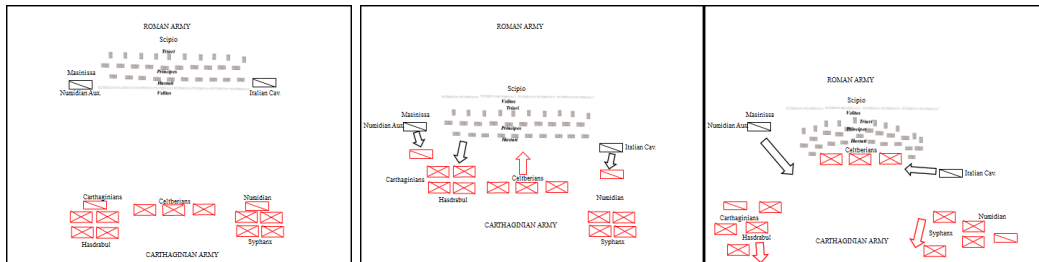
Figure 14. Battle of Great Plains

Source: Author's concept of Battle of Great Plains created from Polybius, *Rise of the Roman Empire*, trans. Ian Scott Kilvert (London: Penguin Books, 1979).

According to Polybius, the armies clashed for a short period, and the Carthaginians and Numidians quickly routed. Previous battles had lowered their faith in their ability to defeat the Romans; thus, the Carthaginians and Numidians fled back toward their respective cities. The Celtberians, having broken a truce with Rome, fought to the death.[142] This stout defense gave the Carthaginians and Numidians the opportunity to flee the field unhindered by the Roman cavalry; the Celtberians were, however, completely destroyed.[143]

---

[141]Ibid.

[142]Polybuis, *The Rise of the Roman Empire*, 460.

[143]Ibid., 460-461.

This case study demonstrates the traditional maniple system's implementation against the Greek-style-phalanx system under ideal conditions. This battle shows a slight change in implementation of cavalry and the maniple infantry formation performing as designed. The main takeaways from this battle are the use of auxiliary cavalry and the implementation of the infantry forces.

The Romans used a larger force of cavalry in a more definitive role on the battlefield. The use of local forces, as auxiliaries proved to be decisive during this battle. Typically, the Romans did not put a huge emphasis on mounted forces relying instead on the maniple's infantry. However, to combat the cavalry forces of the Carthaginians, Rome adapted by employing more auxiliary forces.

Masinissa, who was fighting for control of Numidia, provided a unique combat multiplier to the legions. Numidian horsemen were experts at skirmishing and as a rapid maneuver force. This case study shows how Rome used the Numidians directly to counter the Carthaginian Numidians. This employment of Masinissa's Numidians negated the Carthaginian advantage in cavalry. The local forces knowledge of the area and both experience in horsemanship and fighting indigenous forces allowed the Romans to fight on equal terms against the Carthaginians.

The employment of infantry in this case study is an excellent example of the maniple system being used to its fullest capacity. The Roman maniple established its standard battle line and used it to its fullest advantage while fighting the Celtbeirans in the center. The total destruction of the Celtberians depicts how the mutually supporting infantry in the maniple could overwhelm in competent opponent. The Celtberians refused

to surrender, but were systematically destroyed by the synchronized and supported maneuver of the Romans.

The maniple was specifically designed to fight this type of battle. The flat terrain in conjunction with the wide maneuver space was exactly what the Romans needed to employ the maniple formation. With no restricting terrain, the Romans spread their formation out and employed the maniple with proper spacing, unlike at Cannae. Roman auxillaries secured the flanks, preventing them from becoming enveloped and allowing the center to maintain its cohesion. Able to focus their infantry towards an enemy to the front, the Romans quickly dispatched the Celtberians. The Carthaginians and Celtberians facilitated the use of the maniple system by fighting in the standard Greek phalanx formation. The phalanx is exactly the formation the maniple was designed to fight. Thus, the Roman victory is not surprising; a direct offensive assault over level terrain was, after all, the maniple's *forte*.

<div align="center">Battle of Zama</div>

In 202 B.C.E. after failing to reach a political solution, the Roman army clashed with the Carthaginian army on the Zama plain five miles east of Carthage. Hannibal and the Carthaginians arrived first and secured the terrain best suited for cavalry, the strongest part of his army. Scipio's Romans arrived five days later to find the road to Carthage blocked by Hannibal. The stage was set for a major showdown.[144]

Scipio arrayed his forces in the standard battle formation of the *triple acies* with slight modifications. The *hastati* comprised the first rank at normal intervals. The second

---

[144]Polybuis, *The Rise of the Roman Empire*, 468.

rank of the *principes*, however, took their places *directly behind* the first rank with a maniple length between the first and second ranks; normally, the second rank covered the intervals in the first. *Triarii* formed the third rank, as was customary (see figure15).[145] Rather than cover the front as skirmishers, the *velites* instead took station in the gaps in the first and second ranks. Scipio placed the soldiers in this formation to allow lanes for the Carthaginian elephants to pass through the formation. the *velites*, as light infantry, could easily withdraw out of the way of charging elephants, but the front line looked solid from a distance. Scipio placed his cavalry on both flanks with the Italian cavalry, led by G. Laelius, on the left and the Numidian cavalry, led by Masinissa, on the right.[146]

Hannibal arrayed his forces by placing 80 elephants to the front and center of his army. The majority of his army consisted of allies and mercenaries from across the Mediterranean. The front rank comprised 12,000 men, Ligurian, Celtic, Balearian, and Mauritanian warriors. Hannibal's second rank of Libyan and Carthaginian regulars formed up directly behind the mercenaries. His final line formed up 200 yards behind the first two and consisted of Carthaginian veterans from Hannibal's campaigns in Italy. Hannibal dispatched the cavalry on his wings with the Numidian allies on the left and the Carthaginian cavalry on the right.[147]

---

[145]Ibid., 472.
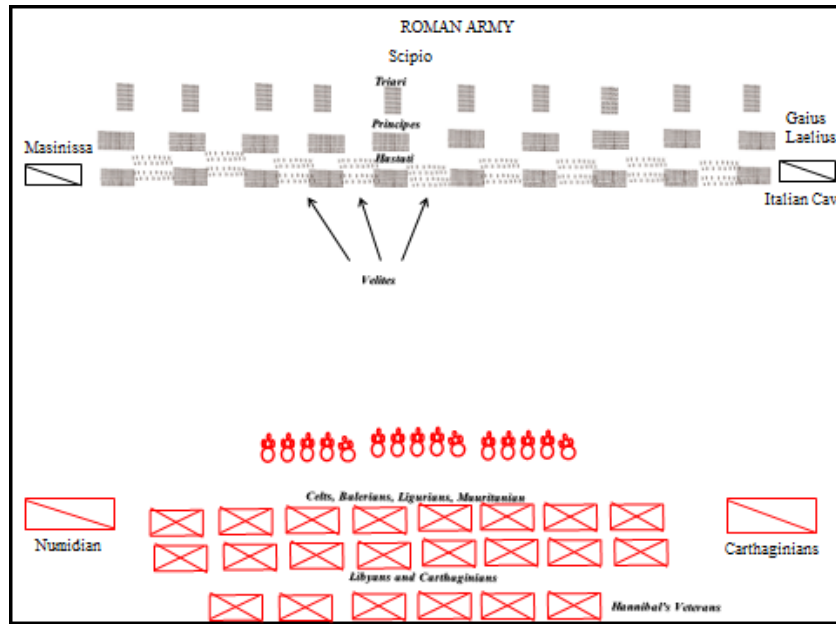
[146]Ibid., 473.

[147]Ibid., 474.

Figure 15. Battle of Zama Phase 1

Source: Polybuis, *The Rise of the Roman Empire,* tran. by Ian Scott Kilvert (London: Penguin Books, 1979), 474. Author's conception of the battle from this classic work.

The battle commenced with skirmishing by Roman and Carthaginian/Numidian cavalry. Hannibal directed his elephants to charge against the Roman center in order to break the cohesion of the maniples. The commotion of the battle panicked some of the elephants, causing some to stampede to the rear and into the Carthaginian army, in particular into the Numidian cavalry. The Roman-allied Numidians took advantage of the confusion by attacking into Hannibal's disorganized Numidian cavalry who quickly left the field. The Italian allied cavalry led by Laelius also capitalized on the confusion and charged the Carthaginian cavalry on the right flank causing them to rout. Laelius pursued them away from the battle.

The elephants that did not panic charged the Roman lines, and the lanes worked as Scipio planned. The *velites* suffered significant casualties, but were able to prevent the

enemy elephants from hitting and disrupting the main line. The elephants that were not killed fled through the spaces between the maniples and left the field.[148]

Figure 16. Battle of Zama Phase 2 and 3

Source: Polybuis, *The Rise of the Roman Empire,* tran. by Ian Scott Kilvert (London: Penguin Books, 1979), 475-6. Author's conception of the battle from this classic work.

With the cavalry and elephants now out of the battle, the infantry clashed in hand-to-hand combat. The Carthaginian mercenary ranks fought with the Roman *hastati* in an evenly matched battle that caused many casualties on both sides. Eventually, the *hastati* overwhelmed the mercenaries, who retreated into the second rank of Carthaginian infantry thereby disrupting the second rank's formation.[149]

The second line of Carthaginian infantry attempted to prevent the mercenaries from disrupting their ranks. Unable to stop the mercenaries pushing through their ranks, the Carthaginians had no choice but to kill them. Now, the mercenaries, trapped between

---

[148]Ibid., 475.

[149]Ibid., 476.

the Romans and the Carthaginians' second line, attacked both forces. This action caused confusion among the *hastati,* but the *principes* reinforced the *hastati* in fighting both the desperate mercenaries and Carthaginians. The second rank, now fighting two enemies, eventually began to give way under the pressure of the reinforced Roman line.[150]
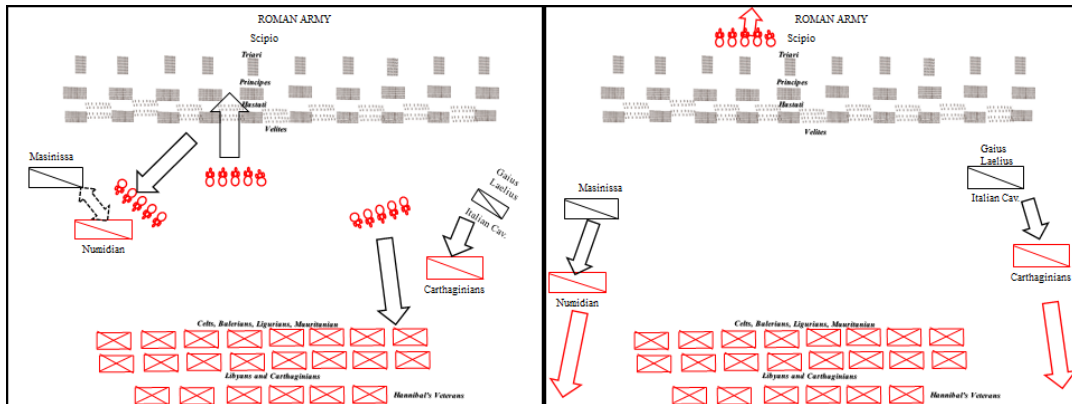

Figure 17. Battle of Zama phase 4 and 5

Source: Polybuis, *The Rise of the Roman Empire,* tran. by Ian Scott Kilvert (London: Penguin Books, 1979), 475-6. Author's conception of the battle from this classic work.

Hannibal's veterans remained in reserve in the third rank and prevented any fleeing soldiers from disrupting their formation by leveling the spears of the phalanxes. Wisely, fleeing troops turned to the outside. Scipio capitalized on the confusion caused by the rout of the first two lines of the Carthaginian formation by reforming his *hastati* in the rear. Scipio also moved his *principes* and *triarii* to the front and decreased the space

---

[150]Ibid.

between the maniples to form a solid front. Once Scipio's forces were in position, the

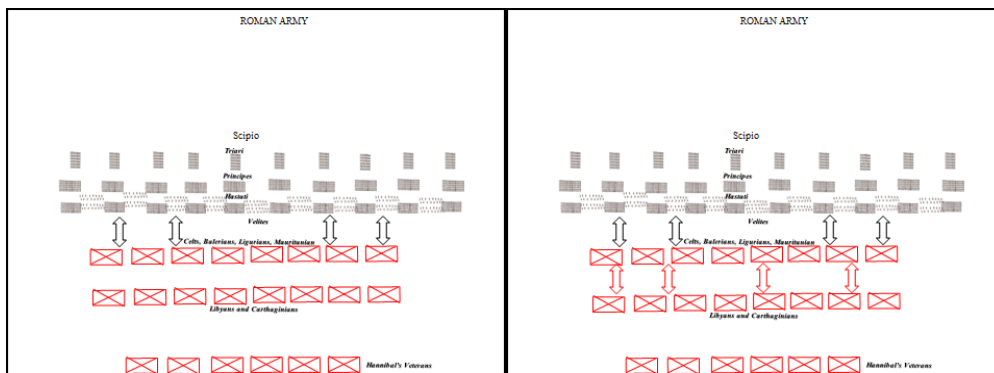Romans advanced and hand-to-hand combat ensued.[151]
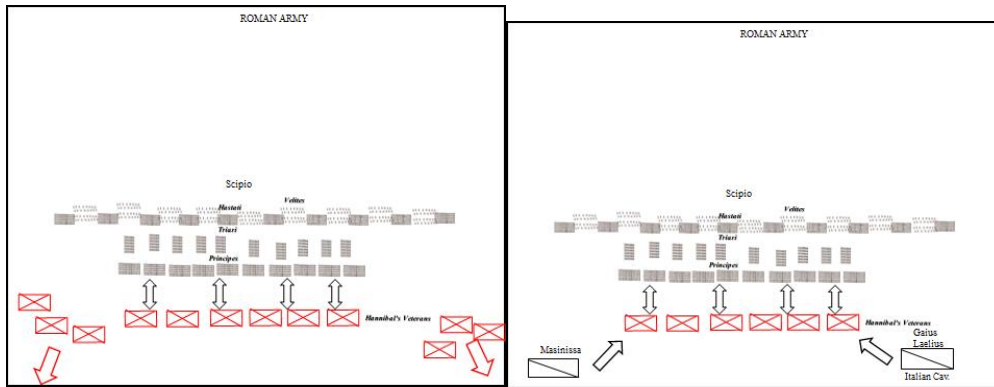
Figure 18. Battle of Zama Phase 6 and 7

Source: Polybuis, *The Rise of the Roman Empire,* tran. by Ian Scott Kilvert (London: Penguin Books, 1979), 477. Author's conception of the battle from this classic work.

Fighting between the two forces was fierce and bloody as maniples clashed with

phalanxes. The fight was even as each side possessed evenly matched arms and

equipment and considerable combat experience. The stalemate continued until the arrival

of the Roman cavalry. The cavalry attacked the rear of the Carthaginian formation and

causing it to rout. The Roman cavalry pursued the Carthaginians and cut down the

remainder of the forces effectively ending both the battle and the war.[152]

Scipio's army suffered over 1,500 soldiers killed, while the Carthaginians lost

over 20,000 with the majority of the rest taken prisoner. This battle was the final battle of

---

[151]Ibid., 477.

[152]Ibid.

the Second Punic War and ended the 15-year conflict.[153] The use of the maniple in this battle serves as an excellent example of use on ideal terrain against a capable foe.

The battle demonstrates important aspects of the maniple system in pitched battle against the Carthaginian Greek-phalanx system. One major key illuminated by the case study is the discipline and superior maneuvering of the Roman forces. Additionally, this case study shows excellent implementation of all four types of Roman soldiers during battle and how, when properly used, the maniple system provided a distinct advantage.

Discipline and superior maneuvering were vital to the success of the Roman army. Scipio's army was unique under the maniple system in that it was extremely experienced and disciplined compared to other Roman armies during the period. Scipio's troops had gained experience during the fifteen years of war because their term of active duty was extended until the end of the conflict (as discussed in chapter 2). Over the course of the long war, the army, for all intents and purposes, became professional. The consequence, of course, was that long service created a more effective military force.

The continuous service instilled discipline in Scipio's army. Under the maniple system, armies trained when not engaged in combat and conducted remedial training. The armies integrated with the veteran *triarii* and centurions, who provided the benefit of additional training at the hands of experienced soldiers. Units that operate together for extended periods naturally begin to learn from each other. Units also learn to work together, allowing for maneuvers that are more complex.

Superior maneuvering played a significant role in the victory at Zama; however, this result rested upon the bedrock of discipline. During the battle, the Romans

---

[153]Ibid.

maintained formation even when confronted by charging elephants. The plan of allowing the elephants an avenue to pass through the lines minimized casualties and maintained the cohesion of the legions' heavier infantry units. This maneuver negated a major Carthaginian tactical advantage by allowing the maniple avoid disruption.

As the Roman *hastati* clashed with the Carthaginians and the front line broke, confusion spread though the front line. Superior maneuver and discipline allowed the *principes* to move forward and reinforce the line of the *hastati*. As the battle continued, the second Carthaginian line also retreated; the Romans maneuvered the *hastati* to the rear of the formation to reorganize and engaged with the fresh *principus* and *triarii*. This action shows the linkage between discipline and superior maneuver as conducting a passage of lines under combat conditions while maintaining cohesion is always a most difficult maneuver.

That discipline played such a significant role in this case study exposes a major flaw in the maniple system. The maniple system required time to train and to gain experience to be effective in combat. Inexperience led to the destruction of the entire army at Cannae. In this case study, an experienced army that had been under the same leadership for an extended period triumphed. However, the typical maniple army was a quickly raised, citizen militia that served for a short period, usually between planting and the harvest. This meant that many maniplar legions never acquired the level of training, experience, and discipline to beat a more professional opponent.

Jugurthine War

The Jugurthine War by Sallust is the last historical record of the Roman maniple system at war.[154] Close examination of this source allows us another view of the advantages and disadvantages of the maniple system. The same is true of secondary sources.[155] This case study specifically looks at how the maniple performed against asymmetric threat presented by the Numidians. Additionally, it depicts the unique experience upon which Marius drew to formulate his reforms.

War in Numantia began in 111 B.C.E when Jugurtha, the bastard son of the former king of Numantia, seized power from his cousins in a military coup. Prior to the coup, Numantia was a protectorate and ally of Rome.[156] Jugurtha attempted to bribe Rome into supporting his claim to the throne, but the Roman Senate had placed the leaders that Jugurtha killed. Thus, their deaths constituted a challenge to Roman authority.[157] The coup also broke all ties with Rome and threatened all Roman settlements and economic holdings in the region.

To address the threat in Numantia, Rome initially activated a citizen army that was already in winter quarters. Consul Albinus led this army that, in accordance with the Servian Reforms, began the campaign in January.[158] Before diplomatic negotiations were complete, Albinus was already moving troops and supplies into North Africa. Albinus's

---

[154]Sallust, *Catiline's War, The Jugurthine War*.

[155]Sampson, *The Crisis in of Rome*; Matthew, *On the Wings of Eagles*.

[156]Sallust, *Catiline's War, The Jugurthine War*, 58-60.

[157]Ibid., 75.

[158]Ibid., 80.

intent was to force Jugurtha into a peace treaty through intimidation, to bring a quick end to the crisis, and to enhance his own finances in the process.[159] Albinus's actions characterize the general attitude towards the war as quick, beneficial and limited.[160]

When Albinus left Africa for Rome to participate in the consular elections, he left his brother, Aulus, in charge of the army.[161] Aulus moved the army to the wealthy town of Suthul and established a camp site outside of the city. Aulus was unable to conduct a siege due to the city resting on top of a mountain and the large fortified walls surrounding it. Additionally, the winter precipitation caused flooding on the plains that prevented Aulus from setting up an adequate defense or conducting any major offensive operations.[162] Aulus's actions depict the complacency and contempt felt by the Romans towards the Numidians and the war in general.

Jugurtha refrained from direct action against the Romans. Instead, he sent spies into Aulus's camp and bribed some of the auxiliary and Roman leaders. When Jugurtha finally attacked, those he had bribed allowed his men through the gates unimpeded and some of the auxiliaries quickly joined the Numidian attackers. When the Numidian army burst through the gates, mass confusion spread throughout the camp and caused a majority of Roman soldiers to throw away their weapons and flee.[163] Aulus retreated to a

---

[159]Ibid.

[160]Sampson, *The Crisis in of Rome*, 62.

[161]Ibid., 67.

[162]Sallust, *Catiline's War, The Jugurthine War*, 81.

[163]Ibid.

small hill where the Numidians quickly surrounded him. Once Aulus saw that the situation was hopeless, he surrendered and attempted to negotiate a peace treaty.[164]

Rome's response was predictable. She raised reinforcements for the shattered army and sought auxiliaries from among her allies and other Latin communities. The Senate selected Quintus Metellus to assume command of the Numidian campaign. Once elected consul and put in command, Metellus, who distrusted the army in Numidia, enlisted additional soldiers and procured equipment. The Senate supported Metellus by financing his procurement efforts. He may also have used his own money to assist in the procurement.[165] Clearly, the Senate and consuls were now financing armies through either private or state funds and did not require citizens to provide equipment themselves.

Metellus arrived in Numidia and found a broken and undisciplined army. The army mainly remained in its camp, only venturing out to gather necessities. The citizen soldiers focused on surviving their remaining term of service and, consequently, often paid little attention to standard military discipline. Metellus decided not to engage in active operations until discipline and standards had been reinstituted. To that end, Metellus conducted long marches and severely restricted the luxuries available to soldiers.[166] Once Metellus had re-instilled standards, the Roman army marched into Numidia to seek battle with Jugurtha's army. The lack of discipline and the disregard for military standards was very apparent during this period. With most short-term, conscript

---

[164]Ibid., 80.

[165]Ibid., 85.

[166]Ibid., 86.

armies, discipline is very difficult to maintain especially away from home, as they are only serve for a short period before returning to their "normal" lives.

The Battle at the Muthul River was the main pitched battle between the Romans and Numidians. Jugurtha monitored the Roman army's movements and waited for them at the bottom of a mountain pass. Jugurtha established ambush positions and used the vegetation to conceal the Numidian army from the Romans.[167]

Jugurtha positioned Bomilcar with a group of elephants and selected infantry behind a hill out of sight of the Romans. Behind the same hill, Jugurtha extended his line of infantry in battle formation. Jugurtha himself secured the left flank with all the cavalry and 2,000 select infantry, who remained hidden in the vegetation.[168]

As Metellus progressed down the mountain, he noticed the Numidian cavalry hiding in low shrubs to the south. Metellus reorganized his forces by reinforcing the right flank three-fold in preparation for what he perceived as the Numidian main attack. Metellus then placed the slingers and archers between the maniples and divided his cavalry among his flanks. Once reorganized and prepared for battle, the Roman army resumed its march forward.[169]

Metellus did not see any movement from the Numidians and became concerned about the fatigue of his men. Therefore, he dispatched Rufus Rutillus towards the river to secure water and a potential fortification site. Rutillus pushed the cavalry and some of the

---

[167]Ibid., 88-89.

[168]Ibid.

[169]Ibid., 89.

maniples towards the river. Meanwhile, Metellus continued his march towards the Numidians until the rear of his force had cleared the mountain pass.[170]

Jugurtha seeing the last of the Romans exiting the mountain pass gave the order to attack. The Numidian army sprung from its positions and charged the Roman army. Jugurtha used his Numidian missile cavalry to attack the rear and flank of the Roman army while he sent his 2,000 infantry to cut off the mountain pass, which prevented the Romans from retreating up it or using it as a defensive position. Jugurtha's forces harassed the enemy with hit-and-run tactics, first attacking then allowing the Romans to pursue until turning once again to run them down as they were no longer protected by the other maniples.[171]

Meanwhile, R. Rutillus's forces proceeded to establish an advantageous position near the river. Bomilcar, seeing Rutillus's element separated from the main force, committed his force to the battle by attacking the unsuspecting detachment.[172] Bomilcar separated his forces by pushing forward the elephants to break up the Romans' cohesion. The tactic failed as the elephants struggled in the thick vegetation and were quickly either routed or killed by the Romans. Bomilcar's troops, seeing the demise of the elephants, threw down their arms and fled the battlefield.[173]

---

[170]Ibid., 89-90.

[171]Ibid., 90.

[172]Ibid., 91.

[173]Ibid., 92.
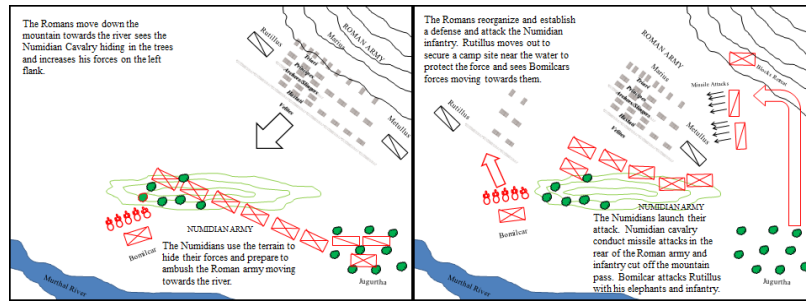
Figure 19. Battle at the Muthul River Phase 1 and 2

Source: Author's concept of how the battle was fought based off of Sallust, *Catilines War, The Jugurthine War, Histories*, trans. By A. J. Woodward (London: Penguin Books, 2007), 91-92.

Figure 20. Battle at the Muthul River Phase 3

Source: Authors Conception/Interpretation of the Battle taken from Sallust, *Catiline's War, The Jugurthine War, Histories,* trans. A. J. Woodman (London: Penguin Books, 2007).

With the onset of darkness and rout of Bomilcar's troops, the rest of the Numidians retreated from the battlefield. Fatigue from the battle and the approach march prevented a vigorous Roman pursuit. Thus, Metellus rejoined Rutillus's detachment and

69

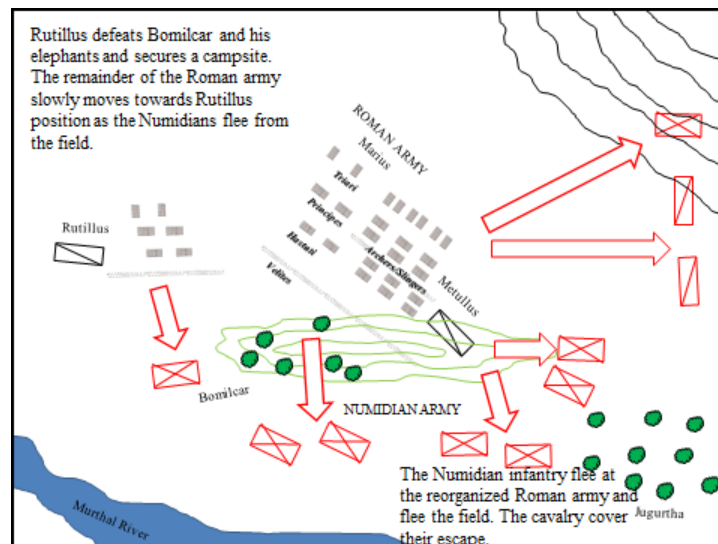secured his position. Each side claimed the battle as a victory, but, in reality, there was no clear victor. The Romans carried the field, but had to camp for several days to care for their wounded. The Numidian army remained largely intact.[174] Jugurtha wisely decided not to engage the Romans in another pitched battle; instead, he switched to guerilla-style, hit-and-run tactics for the remainder of the war.[175]

The Roman maniple struggled with this irregular warfare for the rest of the war; pitched battles were rare, preventing the maniple from being used to its full potential. Sieges and political maneuvering became the primary means of defeating Jugurtha and ending the war.

The Jugurthine War exposes with the weakness of the maniple legion when fighting an enemy that would not fully commit to combat. The main takeaways from this case study are the use of guerilla tactics against the maniple, the importance of discipline, and the limitations of Roman soldiers designed for a specific task. These issues are also the reasons why Marius implemented his reforms soon after the war; they also contributed to what Marius chose to change.

The maniple was not effective against armies using asymmetrical methods, especially those that avoided pitched battles. The maniple was not flexible enough to deal effectively with the constant hit-and-run tactics of the Numidians. The tactics employed by the Numidians prevented the Romans from massing combat power and destroying the enemy. The Romans attempted to engage the enemy cavalry, but, whenever the formation closed, the Numidians dispersed, preventing decisive engagement.

---

[174]Sallust, *Catiline's War, The Jugurthine War*, 91-92.

[175]Ibid., 93.

Additionally, the Roman units that attempted quickly to pursue the enemy lost the security of the main force and were systematically destroyed. The maniple system required the all four types of soldiers to work together to be effective in combat. Without the security of numbers, the exposed unit was unable effectively to defend itself. As stated in chapter 2, each soldier was equipped and trained for a specific task and relied on the skills of the supporting ranks. This guerilla tactics tied down Roman forces, but could not decisively defeat them. In essence, then, the Jugurthine War reached a stalemate on battlefield.

Discipline was also an issue in the Jugurthine War. The first Roman army led by Albinus, later by his brother Aulus, was both undisciplined and unprepared for combat. More interested in getting home than fighting, the Romans were first defeated and then driven out of Numidia. It was not until Metellus took command that discipline was again instilled into the army.

Metellus resisted engaging in combat until he could condition his army for war. The time spent re-training and turning the disorganized force of Albinus into an effective unit took a lot of time. This is a common thread in any examination of the maniple system and also a frequent worry of the Senate and Consuls. The desire for a professional permanent force is apparent in Sallust's writings. This desire and Marius's experiences during the Jugurthine War are the apparent catalysts for the Marian reforms.

Conclusion

This chapter focused on the maniple and its use during numerous battles before the Marian Reforms. Marius used the shortcomings in this chapter to modify the army once he was politically strong enough to do so. The main theme throughout this chapter is

the need for a standing military force. The Roman Senate and various Consuls continually recognized the need for a standing army.

The concern of the Roman Senate was the inexperience of the Roman army and the requirement for it continually to adjust and mobilize against shifting threats to Roman interests. Instilling discipline and gaining experience take time; however, the necessary time was not always available. This meant that quickly mobilized Roman armies were often ill-prepared for combat operations.

Marius saw the maniple system as ineffective against the multiplicity of threats represented by Rome's enemies. His initial changes toward a standing army system spurred change throughout the entire Roman military establishment and led in the direction of the Roman cohort. To be clear, Marius did not create the cohort system, but, as this chapter makes clear, there were obvious issues with the method Republican Rome used to fight its wars and generate its forces. Most of the questions raised by Rome's enemies could be answered in a word—professionalism. The price of military professionalism is a standing army. The next chapter will examine the cohort system in action fifty years later. Using the Gallic Wars as the case study, we will examine the advantages and disadvantages of the new system.

CHAPTER 4

CASE STUDIES OF THE COHORT LEGION

This chapter examines the cohort legion in the Gallic and Civil Wars of Julius

Caesar to ascertain the advantages and disadvantages of the system. Thus, battles

Bibracte, River Sabis, Invasion of Britain, and Alesia comprise the focus for the case

studies. Caesar's primary source accounts of the battles and descriptions allow further

investigation into the successes and failures of the cohort legion. The analysis compares

the new cohort system to the maniple system. The main primary source is Caesar's book

on the Gallic Wars, supported by secondary accounts by Gilliver, Goldsworthy, Whitby,

Keegan, and McNab. The secondary accounts largely support the findings of the

chapter.[176]

Gallic Wars

The Gallic Wars are an excellent case study for the following reasons: first, they

followed the Marian reforms by 50 years, which allowed the changes to take hold, and,

second, they involved both conventional and unconventional warfare. Both armies were

armed similarly; however, the Roman force was considerably smaller than the combined

Gallic tribes.

The Gallic Wars began in 58 B.C.E when the Helvetii tribe, located in central

Switzerland, moved to claim lands in western Gaul as their new home. During the

Helvetii's move west, other local tribes, including the Raurici, Tulingi, Latobrigi and

---

[176]Kate Gilliver, Adrian Goldsworthy, Michael Whitby, *Rome At War* (New York: Osprey Publishing, 2005); John Keegan, *The Book of War* (New York, NY: Penguin Books, 1999); Goldsworthy, *In the Name of Rome*; McNab, *The Roman Army*.

Boii, joined them. These migrating tribes provided a large population of both women and children, but, most importantly, they also provided a large population of warriors.[177] This move alarmed the Gallic population and worried the Roman Senate as it jeopardized Roman holdings and allies in the region. Allied Gallic tribes requested Roman assistance in stopping the Helvetii invasion.[178]

In 59 B.C.E., the newly elected magistrate of Cisalpine and Transalpine Gaul (Northern Italy), Julius Caesar, seized the opportunity to further his reputation within the Roman Senate and protect his governorship of Gaul by addressing the Helvetii invasion both militarily and politically.[179] Roman allies in the region welcomed the intervention by the Roman army. By 58 B.C.E., Caesar mobilized his legionary forces and prepositioned reinforcements to aid in his conquest of the Helvetii tribes.[180]

<div align="center">Battle of Bibracte</div>

The Battle of Bibracte in 58 B.C.E. was a battle between six Caesarean legions and the Helvetii and their allies. The estimated number of the legionaries at Bibracte was approximately 24,000 to 30,000 (because numbers could vary in the legions) with an unknown, but considerably smaller, element of auxiliaries.[181] The enemy consisted of an estimated 15,000 warriors from the Tulingi and Boii tribes and an unknown, but

---

[177]Caesar, *The Conquest of Gaul*, 4.

[178]Gilliver, Goldsworthy, and Whitby, *Rome at War*, 42-43.

[179]Ibid., 43.

[180]Caesar, *The Conquest of Gaul*, 5-6.

[181]Gilliver, Goldsworthy, and Whitby, *Rome at War*, 45.

considerably larger, number of Helvetii.[182] These primary tribes took part in the fighting; however, there is mention of runaway slaves who joined the fight and a smaller tribe of around 6,000 people known as the Verbigenus.[183] With no mention of additional tribes nor an accurate number of how many sub-tribes united under the Helvetii, the total enemy forces could be anywhere from 40,000 to 60,000 warriors. This estimate derives from the amount of prisoners later taken and included women and children; however, the Romans were probably outnumbered by almost two to one.

Caesar initially pursued the Helvetii into Gaul until his supplies ran low. He then maneuvered towards the village of Bibracte to forage. The Helvetii, seeing the Roman army cease pursuing their forces, mistook Caesar's move as being made out of fear of the large tribal army rather than logistical necessity. Caesar's scouts reported that the Helvetii were moving toward Bibracte, causing the Romans to move off the low ground and establish a defensive position on higher ground. Caesar sent his cavalry forward as a screen to allow him early warning of a possible Helvetii attack.[184]

Caesar's cavalry performed their mission well and provided early warning that the Helvetii and their allies were positioning for an attack. Caesar then formed his four veteran legions in three equal parallel lines in a modified *triple acies* (reference chapter 2) near the center and on the military crest of a hill. Positioned behind the veteran legions at the crest of the hill, the allied auxiliaries and two newly raised legions formed a

---

[182]Caesar, *The Conquest of Gaul*, 18.

[183]Ibid., 19.

[184]Ibid., 17.

reserve. Caesar's reserve forces entrenched the army's supplies behind a small

palisade.[185]

Figure 21. Battle of Bibracte Phase 1 and 2

Source: Julius Ceasar, *The Conquest of Gaul,* trans. by Rev. F. P. Long (New York: Barnes and Nobel Publishing, 2005), 17-18. Author's conception of the Battle from historical works.

The Helvetii, encumbered by their baggage train, were still forming into battle

lines after the Romans were in position. The Helvetii established their baggage train in a

small fortification while the bulk of the army formed into Germanic fighting squares. The

Helvetii established their fighting ranks in dense compacted formations, creating a solid

phalanx of warriors that mutually supported each other. The Helvetii then surged forward

and quickly routed the Roman cavalry.[186]

---

[185]Ibid.

[186]Ibid., 18.

76
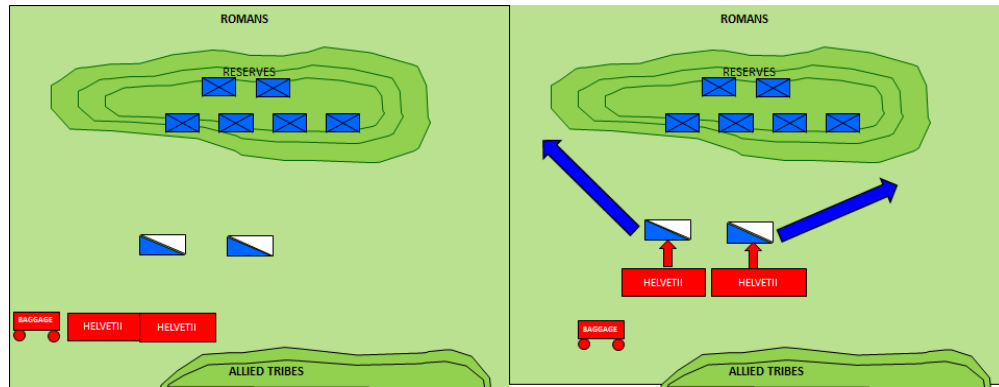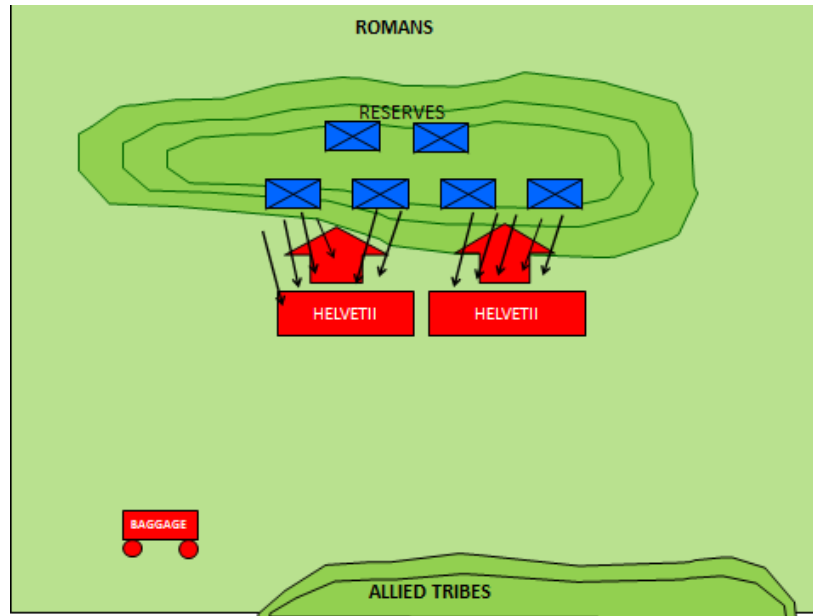
Figure 22. Battle of Bibracte Phase 3

Source: Julius Ceasar, *The Conquest of Gaul,* trans. by Rev. F. P. Long (New York: Barnes and Nobel Publishing, 2005), 18. Author's conception of the Battle from historical works.

The Romans used the local terrain to their advantage to exhaust and slow the advance of the enemy, as the Helvetii had to fight and maneuver uphill. When the Helvetii were within range, the legionaries threw their *pilums* into the compact enemy ranks. The barrage of Roman *pilum*s into the Helvetii had catastrophic effects. According to Caesar, the *pilum* tips lodged into the Helvetii shields, rendering them useless, and forced most the Helvetti to drop their shields. With their enemy now disrupted, the Romans charged downhill. The quick downhill sweeping attack caused the Helvetti to waver and retreat towards a hill approximately a mile to their rear.[187]

---

[187]Caesar, *The Conquest of Gaul*, 18.

Figure 23. Battle of Bibracte Phase 4 and 5

Source: Julius Ceasar, *The Conquest of Gaul,* trans. by Rev. F. P. Long (New York: Barnes and Nobel Publishing, 2005), 18. Author's conception of the Battle from historical works.

Upon reaching the hill, the Helvetti attempted to establish a hasty defensive position at the top in preparation for the continued Roman attack. The Romans maintained their pursuit and attempted to push the Helvetti off of the hill top. With little warning, the rear guard of the Helvetti forces, consisting 15,000 Boii and Tulingi, arrived in the rear of the Roman formation and charged their exposed flank. The Helvetti attempted to take advantage of the Boii and Tulingi surprise attack by counterattacking.[188]
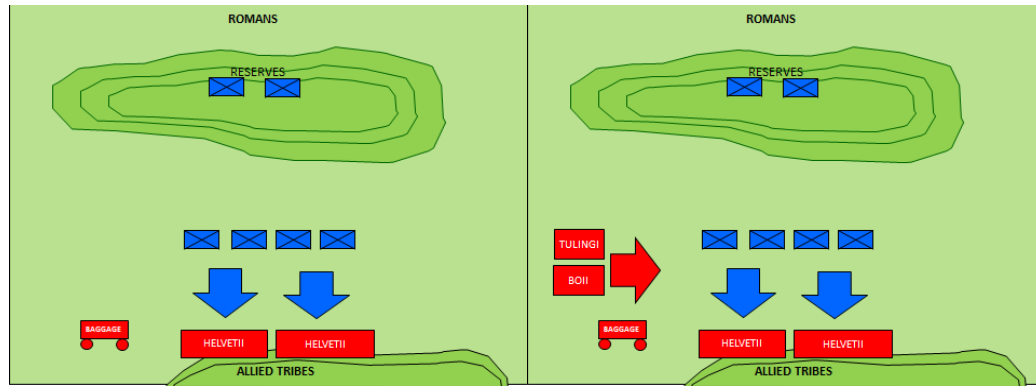
---

[188]Ibid.
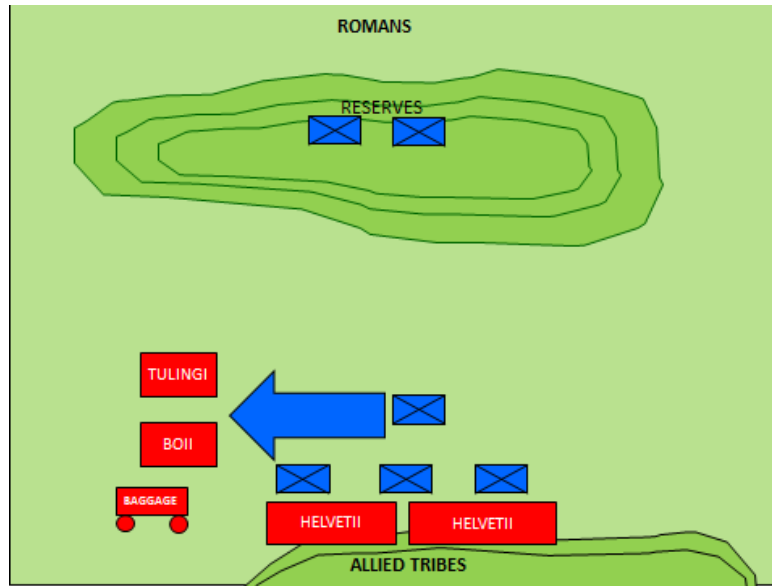
Figure 24. Battle of Bibracte Phase 6

Source: Julius Ceasar, *The Conquest of Gaul,* trans. by Rev. F. P. Long (New York: Barnes and Nobel Publishing, 2005), 18. Author's conception of the Battle from historical works.

The Romans, seeing the threat to their flank, quickly moved to counter the attack on both sides. Essentially, the Romans broke their legions into two separate elements. The front two ranks of the formation continued to attack the Helvetii on the hill, thereby focusing on the larger force. The rear rank quickly changed direction to meet the new threat on the flank; the battle raged on two fronts until the Helvetii finally broke and fled into the surrounding hills while the Boii and Tulingi retreated towards the fortified wagons. Fighting continued around the fortified wagons until the remnants of the tribes were defeated.[189]

---

[189]Ibid.

The tribes marched for three days until they reached Lingones (Langres, France), where they were refused assistance by the Roman-allied towns. Meanwhile, Caesar resupplied his army and tended to his wounded for three days. Once Caesar's forces reconstituted, the Romans pursued the defeated tribesmen. The Helvetii, unable to find any support and unable to cross the Rhine River, were forced to surrender. Caesar received the unconditional surrender of 130,000 Helvetii and allied tribesmen, which effectively ended the crisis.[190]

In conclusion, the cohort legion held a distinct advantage over the Helvetii tribesmen. The Helvetii had numerical superiority over the Romans but the cohort was able to defeat the tribes by using the new formations, a high degree of discipline, and equipment. The main contributing factors in the legions' success were the simplicity of logistics, the *pilum*, and the flexibility of formations.

This case study demonstrates that the logistical reforms of Gauis Marius provided a distinct advantage during this battle. Marius minimized the baggage train of the Roman army (chapter 2), forcing soldiers to carry their own equipment and allowing the army to travel rapidly. This facilitated the Romans rapid movement and seizing the dominant piece of terrain before the Helvetii tribesmen arrived. The Romans had already established their position when the Helvetii arrived tired and exhausted. The legions flexibility to rapidly move and deploy forces was a direct result of the logistical Marian reforms decreasing baggage trains.

The *pilum* that Marius implemented into the Roman army during the reforms facilitated the victory. The soldiers held onto the pilum until the enemy was within range,

---

[190]Ibid.

80

then unleashed a mass volley on the tribesmen. This forced many of them to drop their shields, exposing their body and leaving them practically defenseless. The new weapons provided a unique advantage to the Romans and facilitated their victory by minimizing the enemy's defensive capabilities.

Flexibility was a watchword of Caesar's army during this battle. The modification of the *triple acies* and the rapid maneuver of the legions bears this out. The cohort, no longer confined to the standard formation of the maniple, proved able to adjust and modify formation. Because of its standardized organization, cohorts were interchangeable, and Roman leaders now no longer worried about ensuring each specific skill set within the maniple supported the other. Furthermore, the cohort legion's ability to reorganize its battle line quickly and rapidly manifested itself through the adjustment of the battle formation to address the threat of the tribesmen's flanking maneuver. Again, this maneuver would have been extremely difficult under the maniple system as it would have created a gap in the line leaving the first rank without the support of the skill sets found in the others.

<u>Battle of the River Sabis (Sambre)</u>

Caesar continued his suppression of Gaul by conducting an invasion of the Belgae (Belgium) tribal area. The Belgae tribe, known as the Nervii, resisted Roman rule, but constituted the next logical step in the further conquest of Gaul. The Nervii forced the neighboring Arrebates and Viromandui tribes to support their campaign against the Romans. The Nervii and allies waited for Caesar's legions near the River Sabis and also

awaited the arrival of additional forces from the Belgae tribe of Aduatuci.[191] There is no clear depiction of the size of the force however it would have to be a substantial size force to conduct an direct assault against Caesars forces.

Caesar received reports that the Nervii were massing forces 10 miles south of his position, near the River Sabis. The Romans moved to meet the Nervii, but during the night a large number of Gallic allies deserted and informed the Nervii of the Roman plan. The defectors also told the Nervii that Caesar's forces marched in column with individual legions divided by their baggage trains.[192]

The loss of the Gallic allies hampered Caesar's ability to gather tactical intelligence and screen his army because auxiliary forces comprised most of his cavalry. The mass desertion caused Caesar's forces to be less mobile, less aware, and more reliant on the infantry. It unreliability proven, Caesar kept most of the remainder of the cavalry close to the marching legions in order to protect against possible ambushes, although some pushed forward in an attempt to locate the Nervii positions.[193]

---

[191]Caesar, *The Conquest of Gaul*, 50-51.
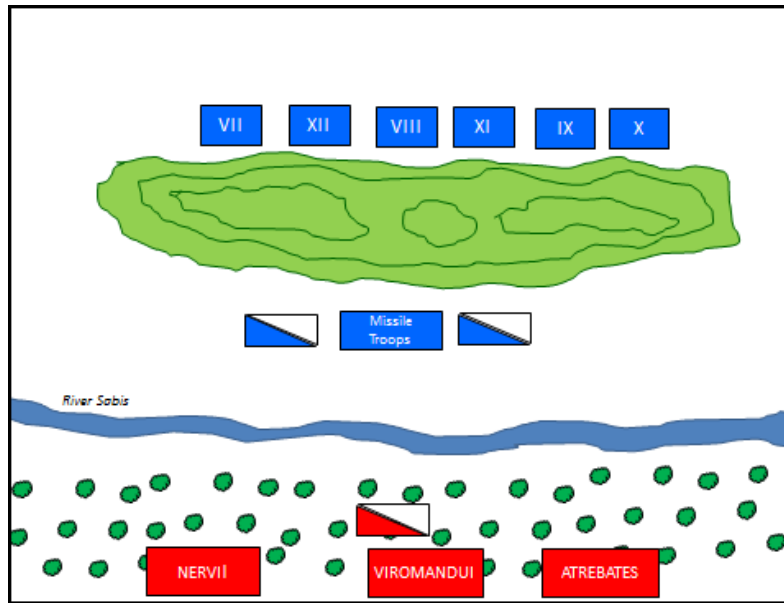
[192]Ibid., 51.

[193]Ibid., 53.

Figure 25. Battle of the River Sabis Phase 1

Source: Julius Ceasar, *The Conquest of Gaul,* trans. by Rev. F. P. Long (New York: Barnes and Nobel Publishing, 2005), 52. Author's conception of the Battle from historical works.

Fortunately, cavalry was not Caesar's only source of tactical intelligence. He received reports from local loyal Gauls about the exact location of the Nervii. Consequently, as the Romans approached, Caesar reorganized his forces. He moved the baggage behind six of the Roman legions with the remaining two legions acting as a rearguard in case of a surprise attack. The Nervii, however, were not so fortunate and based their plan upon Caesar's original march formation. The Nervii wished to spring an ambush, waiting for the first isolated legion to move across the hilly terrain and then attack. The ambush hoped to overrun the first Roman legion, to cause panic in the rest of Caesar's legions, and to defeat the entire Roman army in detail.[194]

---

[194]Ibid., 52.

83

Caesar moved his legions to the projected Roman campsite while the Roman cavalry and supporting missile troops crossed the Sabis River where they ran head long into Nervii cavalry. The Nervii used the cover and concealment of the woods to assault the Roman cavalry using hit-and- run tactics. The Nervii quickly charged the Roman cavalry, disrupting their formation. Then, as the Romans attempted to counter-charge, the Nervii would disperse and maneuver back into the trees, preventing the Romans from massing on them.[195]
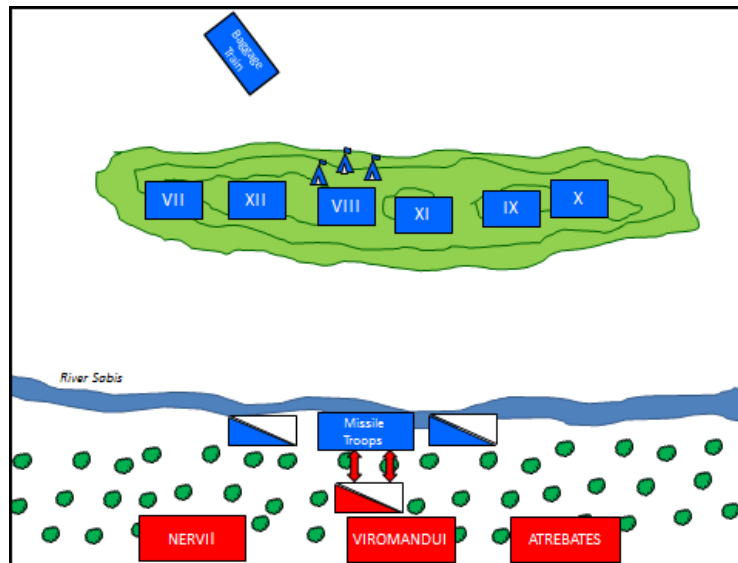

Figure 26. Battle of the River Sabis Phase 2

Source: Julius Ceasar, *The Conquest of Gaul,* trans. by Rev. F. P. Long (New York: Barnes and Nobel Publishing, 2005), 52. Author's conception of the Battle from historical works.

[195]Ibid.

The six Roman legions arrived at the projected campsite and quickly began establishing defenses while the baggage and the remaining two legions moved to join them. The cavalry engagement forward of their lines was of little concern, as it was assumed it was just a small skirmish. The Nervii observed the baggage train and commenced the ambush using the cover and concealment of the hedgerows to surprise the unsuspecting Romans. The Nervii rapidly maneuvered out of their ambush positions first contacting the Roman cavalry. The Roman cavalry was quickly overwhelmed and fled back towards the river.[196]
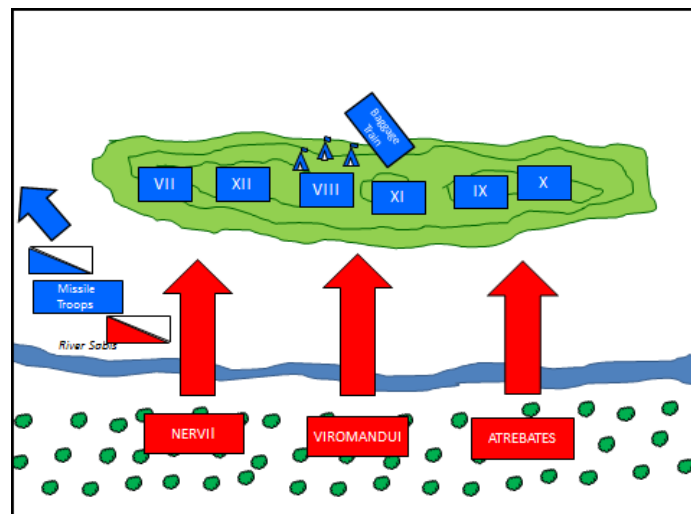

Figure 27. Battle of the River Sabis Phase 3

Source: Julius Ceasar, *The Conquest of Gaul,* trans. by Rev. F. P. Long (New York: Barnes and Nobel Publishing, 2005), 52. Author's conception of the Battle from historical works.

---

[196]Caesar, *The Conquest of Gaul*, 52.

The Romans were busily building the camp fortifications when the Nervii crested the hill. The Romans were caught unprepared for the Nervii onslaught and barely had time to organize the legions into battle lines. Roman commanders attempted to organize the legions into a hasty defense. Many Roman soldiers commenced into hand-to-hand combat without helmets or removing the covers from their shields. Legionaries were unable to find their specific cohorts and assembled under the closest standard.[197]

The Romans' disciplined training and combat experience allowed the legions rapidly to assemble into effective, small, organized groups. The restrictive terrain of hedgerows and rolling hills prevented Roman commanders from seeing or directing the legions properly. Caesar stated "The Roman line of battle was to a large extent dependent upon the circumstances of the moment."[198] Rather than follow the direction of one overall commander, the rank and file legionaries rallied around individual leaders able rapidly to assess the situation, gather men around them, and fight the enemy.[199]

The Roman left flank, consisting of the Ninth and Tenth Legions, confronted the Atrebates. The Atrebates charged directly into the two Roman legions. Exhausted by maneuvering such a long distance, the Atrebates were quickly routed by a barrage of Roman *pilum*. The Ninth and Tenth Legions pursued the Atrebates to the river effectively routing them from the field. Almost simultaneously, the Roman center, consisting of the

---

[197]Ibid., 54.

[198]Ibid.

[199]Ibid., 53.

Eleventh and Eighth Legions, routed the Viromandui and pursued the tribesmen to the banks of the Sabis River.[200]

Figure 28. Battle of the River Sabis Phase 4 and 5

Source: Julius Ceasar, *The Conquest of Gaul,* trans. by Rev. F. P. Long (New York: Barnes and Nobel Publishing, 2005), 55. Author's conception of the Battle from historical works.

With the Roman left and center in full pursuit of the enemy, the Roman camp and the right flank was exposed to a possible attack. The Nervii tribesmen moved slowly on the exposed right flank against the Twelfth and Seventh Legions. The Nervii broke into two formations, one moving directly against the camp and the second on the exposed flank of the Roman legionaries. Adding confusion to the situation, the routed Roman cavalry and slingers reformed and returned to find the camp overrun by Nervii warriors. Upon seeing the Nervii in the camp, the Roman cavalry spurred their mounts and fled the field.[201]

---

[200]Ibid., 54-55.

[201]Ibid., 55.

The Twelfth Legion's formation began to crumble due to heavy losses among both soldiers and officers. Caesar himself dismounted and joined the Twelfth Legion in fighting off the Nervii attack, rallying his forces to hold their ground. The Seventh Legion, seeing the Twelfth Legion holding its position, maneuvered its rear to the rear of the Twelfth, a back-to-back formation that mutually covered each legion's rear. The Nervii attack began to stall despite the two legions being isolated and surrounded.[202]
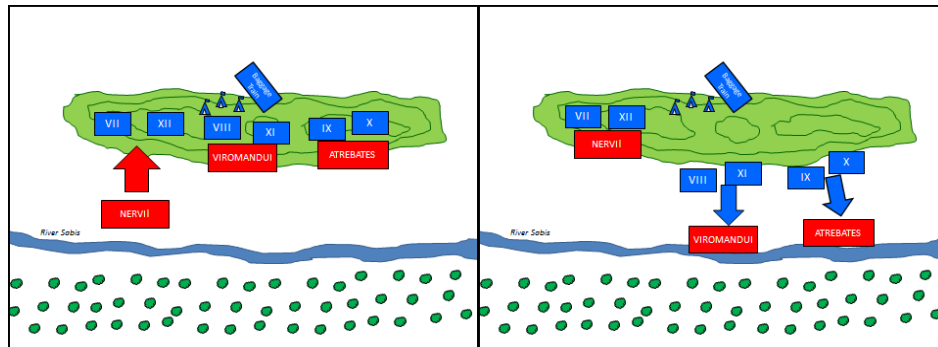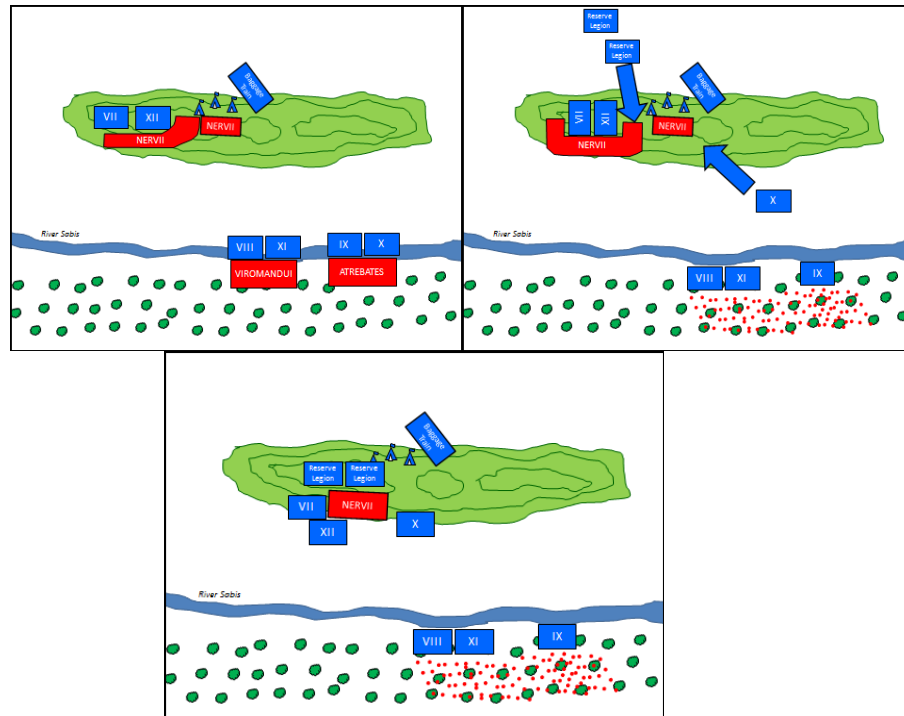
Figure 29. Battle of the River Sabis Phase 6, 7, and 8

Source: Julius Ceasar, *The Conquest of Gaul,* trans. by Rev. F. P. Long (New York: Barnes and Nobel Publishing, 2005), 56-57. Author's conception of the Battle from historical works.

[202]Ibid., 56-57.

The Nervii continued to focus on the Twelfth and Seventh Legions and failed to notice the remaining elements of the Roman column moving quickly to reinforce their beleaguered comrades. Additionally, the Tenth Legion, seeing their two brother legions surrounded, had re-organized its forces and moved rapidly to flank the Nervii. Both elements arrived almost simultaneously and quickly surrounded the Nervii. The Nervii refused to surrender and were systematically killed, almost the last man.[203]

The Battle of Sabis River was a hard fought battle; the rapid and well-coordinated ambush almost overwhelmed the Roman force. Caesar almost lost the entire campaign in one fell swoop, but was saved by the experience of his soldiers and the quick thinking of his officers.[204] The Romans effectively ended the Nervii's military capacity and ended their defiance of Rome.

This case study shows considerable adaptability and flexibility by the Roman cohort legion. The Roman professional army displayed important attributes; these attributes range from being a modular force, small unit leadership, and the iron discipline of the legions. Without these capabilities instilled in the legion through experience and training, Caesar's conquest of Gaul could have ended at the Sabis River.

The Roman cohorts, surprised and outnumbered by the Nervii, had to rely on basic soldier skills and discipline to prevent destruction. The understanding of basic skills and being a modular force (able to fight with other cohorts) allowed them to establish an effective, if *ad hoc*, defense against their Gallic enemies. Officers, unable to receive guidance from their higher commanders but trained to the same standard, formed the

---

[203]Ibid., 57-58.

[204]Goldsworthy, *In the Name of Rome*, 220.

legions into defensive formations, maintained the line, and then broke the enemy independently and without coordination. Again, here we see the implementation of a single type of soldier being able to form with other units outside their original task organization to defeat the enemy. These soldiers in the lowest level of formation the contuberinum would have been nearby and able to form quickly and integrate into the closest century or cohort to establish a defense.

The combined arms aspect of the cohort legion allowed for additional flexibility. The Marian reforms creation of a single, standardized type of soldier provided the commanders with the ability to adapt quickly to changing situations. For example, the Tenth Legion, although committed to combat against the Atrebate tribe, was able to change direction and attack the Nervii who had surrounded Caesar and two other legions. Under the maniple system, the army would have had to readjust the lines into the correct formation and then attack. Here, the Tenth Legion simply did an about face and marched directly at the Nervii, attacking them in the rear.

In brief, the fight at Sabis River stands as a triumph of the new system. The maniplar legions, while perhaps as experienced and disciplined—after a long period of campaigning—as the professional cohort legions, simply were not as tactically flexible and adaptable as their later brethren. Standardization, a process that Marius began, was the key to victory.

<div align="center">First Invasion of Britain</div>

In 55 B.C.E., Caesar crossed the English Channel for both military and political reasons. Politically, Caesar wanted to remain in the public eye to counter the popularity of his rivals back in Rome. By crossing into Britain, Caesar became the first general to

put forces on the island, which increased his fame in Rome.[205] Militarily, Caesar believed that the British tribes were supporting the rebel Gallic tribes. An invasion would sever that support.[206]

Caesar prepared his legions to cross the English Channel by acquiring eighty seaworthy vessels, enough to accommodate two full legions (8,000 to 10,000 soldiers) out of the available eight.[207] Caesar decided to leave the other six legions back in Continental Europe due to the lack of transport and the need to keep an eye on the rebellious Gauls. Caesar also embarked a small cavalry force, which were loaded onto eighteen additional transports. Caesar's fleet contained additional warships equipped with heavy weapons.[208]

British tribesmen received warning of the impending amphibious assault and devised a plan to stop the invasion on the beaches. The tribesmen not only brought forward warriors, but also cavalry and war chariots thereby enhancing the maneuverability of their force. The British stationed their army on high cliffs overlooking the designated Roman landing site and waited.[209]

The Romans' planned departure met with a couple hours of delay, causing the first ships to reach Britain's shores around nine o'clock. Meanwhile the ships transporting the Roman cavalry failed to keep their course and missed the battle. When

---

[205]Gilliver, Goldsworthy, and Whitby, *Rome at War*, 55-56.

[206]Keegan, *The Book of War*, 26.

[207]Gilliver, Goldsworthy, and Whitby, *Rome at War*, 55-56.

[208]Caesar, *The Conquest of Gaul*, 94.

[209]Ibid.

91

the Romans reached the debarkation point, they found the cliffs lined with tribal warriors. The landing site itself was not suitable for disembarkation, as there was little room between the sea and the high rock wall. Caesar chose to sail farther down the coast in order to find a suitable landing site. The Roman ships moved down the coast with the tribal warriors shadowing their every move.[210]

After sailing down the shoreline for seven miles, the Romans located an adequate flat landing site. The Roman transports were too large to land directly on the shore, forcing them to disembark in deep water. Encumbered by the weight of their equipment, the strong tide, and the slipperiness of the beach, the Romans found landing difficult. The legionaries slowly waded ashore and attempted to form into their units.[211]

Figure 30. Invasion of Britain Phase 1 and 2

Source: Julius Ceasar, *The Conquest of Gaul,* trans. by Rev. F. P. Long (New York: Barnes and Nobel Publishing, 2005), 95. Author's conception of the Battle from historical works.

---

[210]Ibid., 95.

[211]Ibid.

The British, seeing the Romans floundering on the beaches, capitalized on the confusion by rushing forward through the shallows to attack. The British fired volleys of javelins into the Romans, who were attempting to organize into cohesive units. This disrupted the legions further. Those cohorts able to organize were quickly charged by British cavalry in an attempt to prevent the Romans from establishing a coherent defense. The British cavalry and charioteers charged small groups of legionaries, who became further isolated. The British used hit-and-run tactics to cut down and disrupt Roman formations; survivors received additional barrages of missile weapons. Under continual barrage and close infantry assault, individual legionaries fell in with whatever other legionaries were nearby, regardless of unit assignment, in an effort to establish a hasty defense.[212]
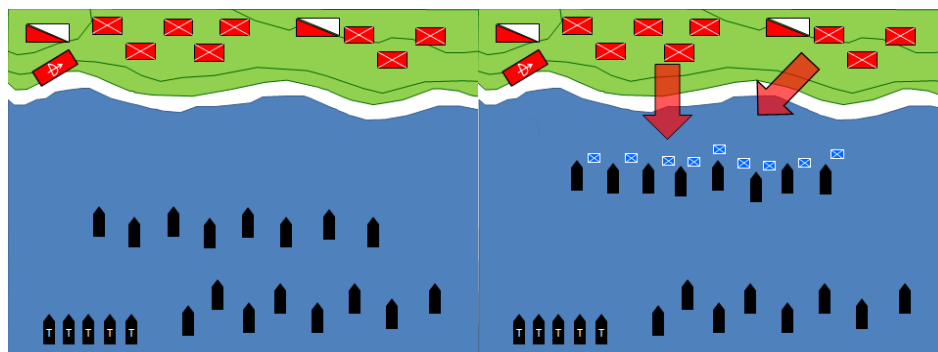

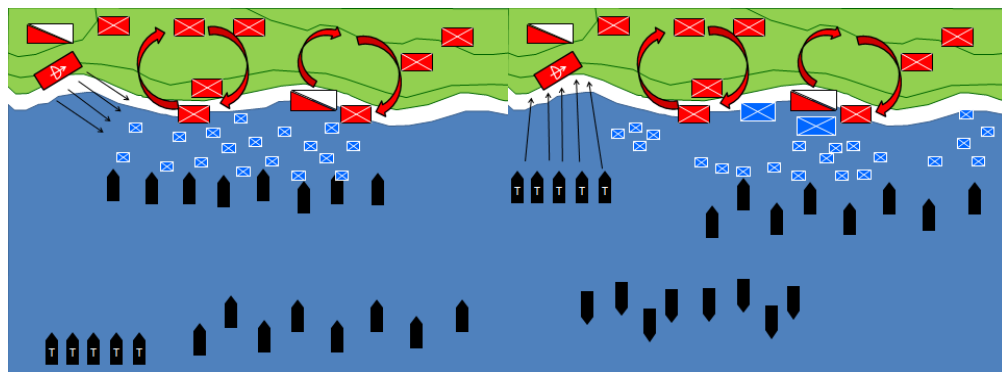Figure 31. Invasion of Britain Phase 3 and 4

Source: Julius Ceasar, *The Conquest of Gaul,* trans. by Rev. F. P. Long (New York: Barnes and Nobel Publishing, 2005), 95-96. Author's conception of the Battle from historical works.

---

[212]Ibid.

Caesar, seeing his men faltering in the shallows, maneuvered his fleet of warships onto an exposed British flank. Once in position, the Romans legionnaires tasked with operating the warships unleashed a barrage of arrows and stones, which disrupted the British attacks and created a lull in the battle. The tactic of placing legionnaires on the ships in support of the assault landing facilitated the landing effort and allowed the follow-on waves of Romans to reach the beach in some semblance of order. Once the Romans established a foothold on the beach and the disorganized cohorts reformed, the Romans switched to the offensive. They surged forward and quickly routed the tribesmen; however, without the support of the cavalry the legionaries could only pursue a short distance.[213]
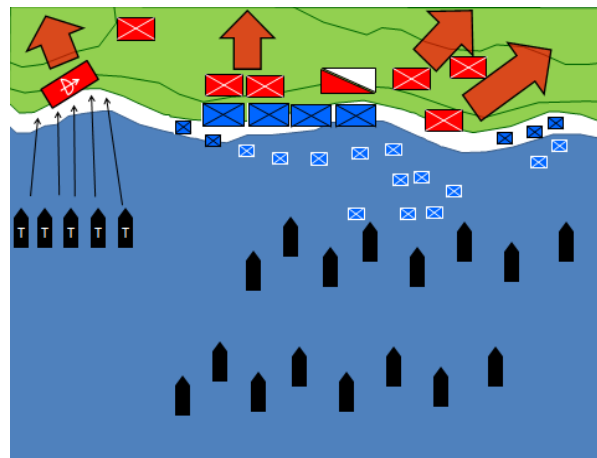
Figure 32. Invasion of Britain Phase 5

Source: Julius Ceasar, *The Conquest of Gaul,* trans. by Rev. F. P. Long (New York: Barnes and Nobel Publishing, 2005), 96. Author's conception of the Battle from historical works.

---

[213]Caesar, *The Conquest of Gaul*, 96.

While Caesar's forces had successfully secured a foothold in Britain and established a fortified camp, the invasion itself was a failure. Due to poor weather and unrelenting attacks from local tribesmen, the Romans were unable logistically to sustain the first invasion of Britain. Thus, Caesar returned to Boulogne with his remaining forces to consolidate and continue the campaign in Northern Gaul.[214]

Even though the invasion was unsuccessful, this case study is an excellent example of the capabilities of the new professional army. The first invasion of Britain demonstrated the transformation of the army into professional, experienced, and flexible force. Again, much like in the previous case study, the Roman army was disorganized; however, this time the Romans faced not only enemy forces but also very difficult terrain, both of which disrupted unit cohesion. The continual onslaught of warriors and bombardment of missile weapons could easily have resulted in a rout. Again, the iron discipline, experience and determination of the Romans allowed a beachhead to be established.

The landing in Britain would have been considerably less effective with the maniple. Had the maniple conducted the landing, the different classes of soldiers (refer to chapter 2) would had to coordinate a defense with four different types of soldiers. Each of these soldiers had specific tasks and relied on the others for mutual support. If disorganized, the maniple lost its cohesion and, thus, its effectiveness. When a cohort legionary landed, he did not have to look for a specific unit or type of soldier to join ranks with; legionaries had only had to look for an eagle standard and fall into a standardized defensive formation. The fact that each soldier was interchangeable allowed

---

[214]McNab, *The Roman Army*, 110.

the legions to prevent total destruction. When viewed in this way, the First Invasion of Britain marked perhaps the "modular" legion's finest hour. Of such a performance, Gaius Marius, the father of standardization at the micro-level, would be proud.

Battle of Alesia

Caesar's conquest of Gaul caused discontent among a majority of the Gallic tribes, which led to open rebellion. Gallic leaders met secretly, united the divided clans under Chief Vercingetorix, and decided to oust the Roman invaders.[215] Vercingetorix began the offensive in January 52 B.C.E. by slaughtering Roman tradesmen and striking the legions' winter camps. Caesar retaliated with offensive operations and forced the Gauls to retreat and seek refuge on top of a large hill near the town of Alesia.[216]

Vercingetorix and his Gallic allies (estimated at some 80,000 strong), having lost a majority of their cavalry, consolidated their resources in the stronghold of the Mandubii near Alesia. The natural obstacles and fortifications on this hill made an assault impossible, thereby necessitating a Roman siege. Vercingetorix wanted to force the Romans into a siege in order to fix the legions until reinforcements could arrive.[217] Caesar ordered his men to build eleven miles of fortifications around the Gallic position in hopes of isolating Vercingetorix from his Gallic allies.[218]

---

[215]Goldsworthy, *In the Name of Rome*, 223-224.

[216]Caesar, *The Conquest of Gaul*, 171-172.

[217]Gilliver, Goldsworthy, and Whitby, *Rome at War*, 70-71.

[218]Caesar, *The Conquest of Gaul*, 218.

Caesar's forces (eight legions or 32-36,000 soldiers) established fortifications around Alesia during daylight and at night posted sentinels in unfinished areas. Minor cavalry skirmishes took place at the base of Alesia as the garrison constantly attempted to disrupt the Roman fortification effort.[219] Caesar had recruited German auxiliary cavalry to supplement the loss of his Gallic cavalry. The German auxiliaries proved effective, which allowed fortification-building to continue. Unable to prevent the closing of the siege lines, Vercingetorix ordered the remainder of his cavalry forces to escape and to seek reinforcements from throughout Gaul. He hoped to crush the Roman army between his own forces in Alesia and those of the relief army.[220]

Caesar became aware of Vercingetorix's plan and quickly began building a second set of defenses facing the opposite direction around the Roman fortifications. Essentially, Caesar created a double-reinforcing line (circumvallation and contravallation), allowing the Romans the ability to reinforce areas vulnerable to attack from whatever direction. Each side of the fortification consisted of obstacles to prevent the Gauls from massing quickly against any specific area. Roman artillery in key areas provided additional support to the defenders. The additional defenses allowed Caesar to continue the siege on Vercingetorix while also protecting his forces. [221]

The rebel Gauls responded to Vercingetorix's request for reinforcements by sending an extremely large force of cavalry and infantry to Alesia. Caesar claimed that this force was 240,000 warriors and 8,000 cavalry; however, modern historians, such as

[219]Goldsworthy, *In the Name of Rome*, 233.

[220]Caesar, *The Conquest of Gaul*, 218-219.

[221]Ibid., 221.

Goldsworthy, contend that this number is greatly exaggerated.[222] Even without exact numbers, the reinforcing Gallic force possessed numerical superiority over the Romans and attempted to use it to their advantage.

The now reinforced Gallic forces conducted multiple assaults on various areas of the Roman positions. Each attack by the reinforcing Gauls was observed by Vercingetorix; this allowed Vercingetorix's forces to coordinate an attack on the opposite side of the fortifications. Caesar's legions had to reinforce both sides of the fortifications being attacked while guarding other sections in case of a surprise attack elsewhere on the line. The legions discipline and flexibility allowed for each point under attack to be reinforced with additional troops. Caesar created a mobile reserve of cohorts able to dispatch to areas under the most intense attacks.[223]
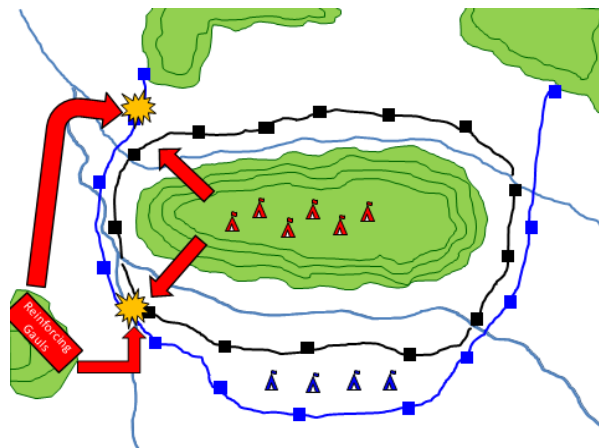

Figure 33. Siege of Alesia

Source: Kate Gilliver, Adrian Goldsworthy, Michael Whitby, *Rome At War* (New York: Osprey Publishing, 2005), 71. Author's concept of the battle.

---

[222]Goldsworthy, *In the Name of Rome*, 228.

[223]Caesar, *The Conquest of Gaul*, 230.

Unable to breakthrough the ramparts, Vercingetorix and the reinforcing Gauls surrendered. The Gallic chiefs presented themselves to Caesar, surrendering their arms and soldiers to the Romans.[224] Vercingetorix's surrender at Alesia marked the end of the Gallic Wars, despite a minor rebellion a year later that Rome quickly squashed. At Alesia, the Gallic tribes lost the ability to resist the Republic of Rome.[225]

The case study of the Siege of Alesia depicts the versatility of the professional Roman army. Caesar employed regular soldiers to isolate the Gaul's by creating siege works. When another army from the Gallic tribes threatened the rear of Caesar's forces, he built another line to protect his rear. The coordination and speed with which the army created these defenses along with their defense against repeated attacks by a much larger force shows the complete versatility of the cohort legion. Roman units moved quickly to reinforce threatened areas and were always more coordinated in their efforts than their Gallic foes.

Caesar's army became experienced during the Gallic campaign. This experience and increased military proficiency that resulted from it led to the success at Alesia. The move towards a professional army, first implemented by Marius 50 years earlier, culminated during this campaign. Simply put, the cohort legion's finest day was in Gaul. New units joining Caesar's forces were quickly integrated with no delay or additional training time required. Roman soldiers arrived ready to fight and to continue the campaign, which allowed Caesar to maintain a high offensive operational tempo.

---

[224]Ibid., 232.

[225]Goldsworthy, *In the Name of Rome*, 238.

Chapter 3 discussed how Scipio's forces gained experience over time; however, those soldiers were seasonal, and, when the campaign ended, the soldiers dispersed. Caesar's army stayed relatively intact throughout the campaign. Had his army been raised under the maniple system, his army would have considerable turnover of personnel requiring him to retrain his new forces unless the Roman Senate deemed the Gallic War a crisis (refer to chapter 2).

Without Marius's steps towards the creation of a professional army, the war in Gaul would have probably have lasted much longer than it did. Certainly, the versatility, coordination, and speed of the legions would have been considerably less without the training model Marius implemented during the Cimbri War.

Conclusion

These case studies all show a professional standing army in action. The key take-away from the cohort legion is the importance of discipline, training, and versatility. All three of these attributes developed within the legion over time as in the maniple; however, there is one important difference—the cohort continually trained and improved until it operated like a well-oiled machine. Because the cohort legion was a standing army, there was no mass exodus after enlistments were up; men lived their lives in the legion, and, consequently, the army became better, tougher, and more experienced. Compared this to the maniple, where most of the experience left as soon as the term of enlistment was up or harvest season approached. Each of these case studies demonstrates the ability of the professional cohort legion to succeed in different types of combat and operations, even when outnumbered and at a considerable disadvantage.

Throughout these case studies, the effect that the Marian reforms had on the Roman Army is clear. The use of the *pilum*, the interchangeability and standardized versatility of the combined arms soldier, and the training and discipline of the professional army greatly contributed to Caesar's success in Gaul. A relatively small number of professional soldiers defeated numerically superior forces repeatedly during this campaign. Without the reforms, it is clear that the war would have continued for an extended period of time, much like the campaigns discussed in chapter 3.

While Marius was not directly responsible for the creation of the cohort system itself, it seems reasonable to assert that his reforms started the Roman army down this path. Marius emphasized effectiveness and results above all other military factors. The maniple system was an effective way to maximize the effectiveness of a *part-time* citizen army. Marius dramatically improved the quality of its parts through standardized equipment and training. The professional (full-time) cohort legion appears the next logical step down the military-effectiveness road. While Marius worked to make the individual soldier more effective, there were limits to how much he could achieve with the maniple formation. He took steps to increase its effectiveness tactically, but was bound by the Servian reforms and the enlistment requirements. The key innovation to maximize tactical effectiveness and flexibility was the cohort, but the cohort could only exist when soldiers committed to long terms of service, which meant that average level of training and experience remained high. Imposing the modular cohort on the part-time maniple system is a recipe for disaster because the cohort relied on professionalism to work.

Whatever its strengths on the battlefield, the Roman military was embedded in society. It was a political as well as military instrument. Moving toward a professional force entailed political risks. No one doubted the loyalty of the part-time army to the state. But what about a standing professional one? It is to a general assessment of military reform during the Roman Republic we now turn.

CHAPTER 5

CONCLUSON

The purpose of this thesis is to examine both the causes and process of the Marian reforms and to assess their effectiveness on the battlefield. During Gaius Marius's time major changes were made to the Roman military system. Several questions guided the research: How did the Roman military innovate? What exactly were the changes implemented? How did the transformation of the Roman military take place? What was the role of Marius, and how did he succeed in pushing his program forward despite formidable opposition? How successful were the reforms, and what role did the reforms play in the success of the Roman military?

The system existing before Marius implemented his changes was the maniple. The maniple system is similar to the current U.S. National Guard system. The maniple was a citizen militia under the control of the Roman Republic that the Senate activated in times of military emergency. The part-time citizen soldiers using the maniple struggled with two main issues—the inability to perform duties outside of their designated military role and, initially, the relatively low level of discipline and experience at the commencement of military operations. Both of these issues resulted from the manner in which the maniple was recruited. The part-time nature of the force meant that a system was devised that maximized the strengths of the manpower available. Experience was always at premium in a Roman maniple legion, but the most experienced were also the oldest. Thus, we see the unique organization of the maniple—one in which the most physically capable, but least experienced, engaged the enemy first while both age and experience rose as one progressed through succeeding lines.

Roman soldiers in the maniple by design had a specific task on the battlefield. *Velites* were excellent skirmishers; however, if engaged in hand-to-hand combat against heavy enemy infantry or cut off from the rest of the army, they would be quickly killed. The battle lines of infantry suffered from the same issues. The *hastati* and *principes*, although similarly armed struggled without the support of each other. The *principes*, being older and more experienced, were designed to reinforce the *hastati* and to fill gaps in the line. The *triarii*, the oldest and most experienced men, acted as the maniple's reserve and were only committed to battle when necessary. Thus, each section of the maniple needed the other to be successful in conducting combat operations.

This inter-reliance on each specific line of battle required precise implementation for effectiveness on the battlefield. The case studies in chapter 3 depict the issues that arose while trying to implement the tactical system in practice. During Cannae, the tightly packed maniple proved unable to use each line to its full capacity. The Romans' condensed formation prevented the supporting ranks from maneuvering to assist other portions of the line. This left individual units and, indeed, even individual soldiers to fight for themselves. Naturally, this failed miserably and led to the almost total destruction of eight Roman legions.

The maniple legion fighting against Jugurtha at the Murthal River faced harassing hit-and-run tactics from Numidian cavalry, causing the Romans to become virtually incapacitated. Here we see the Roman maniple, being unable to focus their forces at a specific enemy, unable properly to implement the system. The guerrilla-style tactics prevented the Romans from massing any combat power effectively against the Numidians, and any attempt to take the offensive disrupted the cohesion of the unit

slowing it down to almost a crawl. Unable to capitalize on the strength of each supporting line of infantry, individual units retreated to the safety of the main force or faced destruction.

The maniple did best when its flanks were protected and when an enemy gave battle frontally on open terrain, such as when fighting pitched battles against armies using the standard Greek-style phalanx. The Battle of Zama is an excellent example of the maniple fighting an engagement specifically tailored to match the strengths of the Roman military system. The terrain and the enemy tactics allowed the Romans to use each line of battle to its fullest capacity. Thus, casualties for the Romans were minimal while the Carthaginian army scattered across Africa. This proves that the maniple was effective when battles matched the purpose for which it was designed. The problem, of course, was that not every enemy was quite so obliging.

Discipline and experience also was a vital area where the maniple system struggled. Creation of a legion involved recruiting soldiers based upon their economic class standing and placing them accordingly. Once in the system, Roman soldiers received basic training by conducting drills and practicing basic soldier skills. The initial term of service eventually expired, allowing the soldiers to return home and creating a Roman ready reserve. Once called back to service, the citizen militia had to undergo rigorous and rapid training to be combat ready. However, the Romans usually did not have the time for this and often put inexperienced forces in the field.

During the Punic Wars, the Roman Senate concluded that the poor performance of the Roman army in the field was due to exactly this issue. At Cannae, Consul Paullus attempted to delay the battle in hopes of "blooding" his army with smaller engagements.

105

That Paullus was not able to do this contributed to the disaster. Scipio, on the other hand, was able to "blood" his army, and his operations in Spain as well as experienced reinforcements from Italy facilitated his victories at The Battle of Great Plains and Zama. These case studies show what the maniple system could accomplish when staffed by disciplined and trained troops.

According to Sallust, the Romans were initially unsuccessful against King Jugurtha and the Numidians because of poor leadership and lack of discipline. When Metellus assumed command of the campaign, he delayed offensive operations for an extended period. This allowed Metellus to raise the conditioning, training, and discipline level of his troops before pursuing Jugurtha. The time required for remedial training extended the war and had a detrimental effect politically in Rome and for Jugurtha's African allies.

The case studies in chapter 3 depict the fundamental flaws of the maniple legion. When the maniple system was unable to deploy its forces appropriately and fight a pitched battle, the Romans struggled. The inability to adapt effectively to different tactics prevented the Romans from ending conflicts quickly. Citizen soldiers' general lack of discipline and experience also contributed to extending conflicts. The valuable resources and time that were spent preparing armies for a campaign were an economic, political, and financial hardship for the Republic, creating discontent and fear among the citizens. All this paved the way for Gaius Marius to implement his reforms within the Roman military system.

Gaius Marius implemented his reforms in attempt to rectify the previous issues. Marius only directly instituted three changes—opening the military to people outside of

the 5th Class, making the eagle the legion's standard, and implementing the new *pilum*.

However, although most of the primary sources are lost or incomplete, there is every

reason to believe that Marius did much more. Marius's changes specifically affected two

areas of the Roman military system: first, increasing military effectiveness through

proficiency; and, second, standardization of training to create a soldier capable of

conducting multiple tasks on the battlefield.

Marius's primary worry was the threat that aggressive, well-armed outsiders

posed to the Roman Republic. Creating a more proficient army was his answer to this

threat, and it motivated his relentless reform efforts, along with the acquisition of

personal political power of course. Modern historians suggest that the army had gradually

changed over time which allowed Marius to capitalize on those leaders before him.

[226]Due to the loss of many of the primary sources during the so-called Dark Ages, there is

no clear evidence to support or deny that Marius was actually responsible for the change.

However, despite the loss of a majority of primary sources, there is some evidence to

support the claim that Marius changed more than the three for which there is specific

evidence.

First, Sallust mentioned the *velites* throughout the Jugurthine War, and Polybuis

references them in his works.[227] However, when we turn to the campaign against the

Cimbri, all reference of this specific class of warrior disappears and all units are referred

to as infantry. [228] This suggests that, because Marius opened the Roman army to all

---

[226]Goldsworthy, *In the Name of Rome*, 137.

[227]Polybius, *Rise of the Roman Empire,* 321.

[228]Plutarch, *Lives,* 554.

citizens, there were no longer be a specific positions a person filled based upon wealth or age. Instead, soldiers were now just that, soldiers. With the class system no longer a defining factor, specialized troops still existed within the army; auxiliary forces supplemented any military function not fulfilled by the Roman cohort legionary.

Valerius Maximus supports this idea as in his excerpt discussing the training that Marius instituted in preparation for the Cimbri War.[229] The implementation of gladiator schools to train soldiers in swordsmanship makes no mention of differentiation between types of soldiers. Discussion of the new style of *pilum* focused on its unique ability and its universal distribution.[230] Significantly, which specific maniple rank would utilize it was never addressed. It seems reasonable, then, to conclude that there are no longer four classes of soldier, but one subjected to standardized training. Auxiliaries attached to the legion would not need additional training, as they were equipped by their respective tribes or state and were capable of filling roles for which heavy infantry was ill-suited. In summary there is the distinct impression that Marius had embarked down a path toward what today the U.S. Army calls "modularization." Marius created a soldier that was a standardized, self-contained combined arms soldier that was interchangeable with his peers and capable of both missile and hand-to-hand combat. It is a short step from the multi-purpose, standardized soldier to the cohort.

In any case, Marius's changes maximized the benefits of the existing Roman system while minimizing the risk to the Republic *from the outside*. The Roman army would be more militarily effective in operating as a unit that was prepared to counter a

---

[229]Parker, *The Cambridge History of Warfare*, 52.

[230]Plutarch, *Lives*, 556.

108

variety of threats. The reduction of training to one type of soldier instead of four simplified the difficulties of training and facilitated the rapid response of the legions to threats to the Republic. The later cohort legion with one type of soldier would prove to be considerably more flexible than the maniple and better able to address a multiplicity of tasks instead of just a few.

The transformation of the maniplar soldier to the cohort legionary created an army capable of adjusting rapidly to changing situations. Each soldier was now trained and equipped not only for the task of combat but for any task that might facilitate the effectiveness of the army as a whole. As seen in the case studies, the soldiers continually dug fortifications, skirmished, acted as cavalry, or manned ships. In the First Invasion of Britain and the battle against the Nervii, the legions became disrupted and disorganized in *ad hoc* small units. However, the legionaries eventually established themselves a defensive position until able to consolidate into a larger force. Soldiers merged with units outside of their designated formations, functioned, and coordinated as a singular unit. The maniple system was unable to do the same thing due to the incompatibility of the four ranks. A *veles* would, for example, provide no additional protection to a *triarius* in a hand-to-hand fight, and *vice versa*.

Victory over the Cimbri facilitated the next logical step for the Romans, the creation of a standing professional army. With the ability to standardize training for all, soldiers could rapidly and effectively be produced. Not only was the training simplified but also the weapons used. Mass-produced and standardized weapons now armed the soldiers. Over time, the Roman Army's discipline and experience continued to grow,

creating a formidable force. However, with the expansion of the Roman lands, the need to finance more professional legions arose.

Financing the army was the major weakness in the Roman Republic. The Senate's solution was to allow selected Consuls to provide their own finances to keep their armies in the field. This change caused the Republic to lose control of its armies; the loyalty of the army now resided with the elected Consul responsible for financing the force and not the Republic. The consequence of the Senate and Republic's loss of control of their military resulted in the eventual downfall of the Republic and a dictatorship. Thus, we have a paradox. At the same time that the Roman military reached new heights of professionalism and thus effectiveness against outside threats, the military reforms increasing threatened political stability within the Republic.

Marius understood that change military reform involved political reform. The process was complicated and difficult. In order for Marius to change the system and create an effective military, he had to change the relationship politically. Not being from an aristocratic family, Marius established himself in the political arena through popularity gained by military success. He built a coalition of supporters from high-ranking families and the lower classes. He had to do this to see his reform agenda through; political power provided him with the necessary freedom and influence to be an effective reformer.

As discussed in chapter 2, Marius's popularity rested upon the lower classes. His sponsorship of new laws and opening of military service to the lower class garnered substantial political support from the voting population; so, too, did his status as a "new man." Even with substantial political opposition in the Senate, Marius overwhelmed his opposition because of his immense popularity. The crisis of a potential invasion from the

110

Cimbri provided him with the opportunity to change the army in whatever way he deemed necessary. The Senate proved helpless to intervene.

Marius solidified his military reforms during the war with the Cimbri. With the delayed attack on Rome by the Cimbri, Marius continually refined his reforms and created what he deemed the right kind of army. Marius defeated the Cimbri in an astonishing victory. This victory proved that his reforms had made the army more effective and mobile than the pre-existing maniple system. The victory facilitated the Marian Reforms to take hold and furthered efforts to change to the Roman Army.

The change from the maniple to the cohort created a more efficient and effective army. Marius combined all aspects of the maniple system into one combined arms soldier. Eventually, this effort led to the cohort system. The case studies in chapter 4 depict just how effective the "new" legionary was. In the field, soldiers are constantly required to conduct missions outside what is considered normal. In the case studies, the enemy consistently outnumbered the Romans. Often, the enemy also possessed an advantage regarding terrain. However, the Roman Army consistently overcame these difficulties by relying on the discipline and experience of the professional Roman heavy infantry. The case studies depict just how military effective and reliable the cohort had become.

These changes, however rapid or gradual they may have been, had negative effects on the Roman Republic. The army became more reliable militarily, but less reliable politically. The Roman Senate considered having a strong military a huge advantage because it selected the leaders. However, having a strong army was a tradeoff. The generals in charge of the legions gained power as soldiers became more loyal to their

commanders than to the Republic. Eventually, Julius Caesar capitalized on this flaw by crossing the Rubicon and established himself as dictator.

In conclusion, how did the Roman military change? The Roman Army transformed from a citizen-based militia to a standing professional army. The change happened in response to a military crisis that threatened Rome; Marius used his popularity and the political system to force his innovative ideas upon the maniple system. Marius's experience in the field informed his ideas. The Jugurthine War played an especially important role in this respect. It informed his understanding of military tactics and logistics. Failures by other Roman leaders also informed his thinking. The system he created eventually became the legionary cohort, an adaptable force able to meet any emerging threats and serve the needs of the republic. Success on the battlefield validated the Marian reforms, both initially and subsequently during other conflicts. These successes facilitated the path of change and further developed the Roman Legion into one of the most complete fighting forces in history.

Today, the U.S. Army confronts a staggering array of both known and emerging threats. The last decade has been one of rapid change for the institution. In many ways, these changes mirror those of Marius. General officers continually work with Congress in maintaining both the National Guard and the Army. Political and popular support is continually gained or lost due to factors beyond the Army's control; these factors affect the budget and troop strength. Crisis forces militaries to change, but the success of the innovations and adaptations institutionalizes them. One thing remains—professionalism remains a firm base upon which to build effective military capability. Maintaining an

effective professional force is expensive and always involves tradeoffs. Gaius Marius understood this over two thousand years ago.

GLOSSARY

Appian: Greek historian born in Alexandria around the end of the 1st Century. Witnessed the Jewish uprising against Rome in 116 A.D.E. Rose to the rank of procurator allowing him access and time to research Roman history.

Celtberians: Spanish warrior tribe located on the southern portion of the Iberian Peninsula (Spain).

Cornelius Scipio Africanus: b. 236 B.C.E. Consul and Senator that fought at the Battle of Cannae survived and later defeated Hannibal at the Battle of Zama.

Flavius Vegeitus Renatus: wrote a short military account *The Military Institutions of the Romans* on Roman Military practice for the emperor between 383-450 A.D.E. His works gave a detailed account the creation, discipline, training, and implementation of the Roman legion.

Hannibal Barca: Carthaginian general born 247 B.C.E. famous for combat in Spain and the invasion of Italy. Destroyed eight legions at the Battle of Canne, Italy and later was defeated at the Battle of Zama by Scipio Africanus.

Hasdrabul Barca: Carthaginian general and Hannibals older brother.

Hastati: Light infantry soldiers served in the front rank of the maniple system.

Jugurtha: Seized control of Numidia in 112 B.C.E. and threatened Roman holdings in Africa. Conducted guerilla style tactics against the Romans waging a war for five years.

Julius Caesar: Born 100 B.C.E. Military General and Consul of Rome eventually military dictator of Rome. Conducted military operations to conquer Gaul and Brittan and kept a detailed account of those operations. Wrote the book Conquest of Gaul describing firsthand accounts of military and political operations.

Livy: (Titus Livius) Roman historian who lived from 59 B.C.E to 17 A.D.E. in the city of Patavium. Wrote on the origins of Rome and was counter to the writings of Sallust.

Masinissa: King of Numidia from 238 to 148 B.C.E. joined Scipio Africanus in the second Punic War. Commanded the Numidian cavalry fighting against Carthage.

Metellus: Consul and Senator of Rome, Led the Jugurthine War from 112 B.C.E. until 108 B.C.E.

Numidians: North African kingdom established around 400 B.C.E current day Morocco, Libya, and Tunisia.

Pliny the Elder: born 23/24-79 A.D.E. prominent roman from northern Italy wrote a 37 volume book on Natural History.

Plutarch: A Greek philosopher and biographer who lectured and taught in Rome. Lived between 50 -120 A.D.E. was a student of history and wrote some of the most important works of historical figures of the Classical age.

Polybius: Greek historian lived from 200-118 B.C.E. Befriended Scipio Africanus allowing him access to significant figures of the time. Described Roman Rise to power and traced history around the known world to write his history.

Principes: Medium infantry soldiers that served in the second rank of the maniple system.

Sallust: (Gaius Sallustius Crispus) a Roman historian, senator, praetor, and governor of New Africa. Lived between 86-35 B.C.E. a member of the aristocracy from the town of Amiternum, whoserved under Julius Caesar in 49 as a legionary commander.

Spyanx: Numidian King who joined the Carthaginians to fight the Romans during the Punic Wars. When the Carthaginians lost he was dethroned.

Tacticus: Roman historian born 56 A.D.E to 117 A.D.E.. Became a praetor in 88 A.D.E., served in Germany, Gaul and Asia. Compiled his works from historical archives during the time period.

Triarii: Heavy veteran maniple infantry soldiers that served in the third rank of the maniple system.

Velites: Light skirmish infantry that served forward of the front rank of the maniple system used to disrupt cohesion.

The Source for Glossary Terms: John Roberts, *Oxford Dictionary of the Classical World* (Oxford: Oxford University Press, 2005).

BIBLIOGRAPHY

Primary Sources Consulted

Appian. *The Civil Wars*. London: Penguin Books, 1996.

Ceasar, Julius. *The Civil War*. Translated by Jane Gardner. London: Penguin Books, 1977.

———. *The Conquest of Gaul*. Translated by Rev. F. P. Long. New York: Barnes and Nobel Publishing, 2005.

Cicero, Marcus, and Michael Grant. *Selected Works*. Translated by Michel Grant. London: Penguin Books, 1960.

Clough, Arthur Hugh, ed. *Plutarch, Plutarch's Lives,* 2 Vol. Modern Library. Random House, 2001.

Flavius Vegetius Renatus. *The Military Institutions of the Romans*. 2 Books. Translated by LT John Clarke. Mansfield Centre, CT: Martino Publishing, 2011.

Livy, Titus. *The Early History of Rome* Translated by Aubree de Selencourt. London: Penguin Books, 1960.

Plutarch, *Lives* 75. Translated by A.C.E. Dryden. New York, 2001.

Polybius. *The Histories (BC 200-118)*. Vol. 6. Translation by Robin Waterfield. New York: Oxford University Press, 2010.

———. *The Rise of the Roman Empire*. Translated by Ian Scott Kilvert. London: Penguin Books, 1979.

Sallust. *Catilines War, The Jugurthine War, Histories*. Translation by A. J. Woodward. London: Penguin Books, 2007.

Tacticus, Cornelius, *The Annals of Imperial Rome*. Translated by Alfred Church and Jackson Brodribb. Barnes and Nobel Publishing, 2007.

Secondary Sources Consulted

Billing, Jessica A. "The Military Standards of the Roman Legions." *Ancient Warfare Magazine* 7, no. 1: 41-45

Cowan, Ross. *Roman Battle Tactics 109BC-313AD*. Oxford: Osprey Publishing, 2007.

———. *Roman Legionary AD 69-161*. Oxford: Osprey Publishing, 2013.

———. *Roman Legionary 58BC-69AD*. Oxford: Osprey Publishing, 2003.

Dando-Collings, Stephen. *Legions of Rome*. New York: St. Martin's Press, 2010.

Fields, Nic. *Boudicca's Rebellion AD 60-61*. New York: Osprey Publishing, 2011.

———. *Roman Battle Tactics 390-110 BC*. Oxford: Osprey Publishing, 2011.

———. *Roman Republican Legionary 298-105BC*. Oxford: Osprey Publishing, 2012.

Gilliver, Kate, and Adrian Goldsworthy. *Rome at War Ceasar and his Legacy*. United Kingdom: Osprey Publishing, 2005.

Gilliver, Kate, Adrian Goldsworthy, and Michael Whitby. *Rome At War*. New York: Osprey Publishing, 2005.

Goldsworthy, Adrian. *In The Name of Rome: The Men Who Won the Roman Empire*. Great Britian: Weidenfeld and Nicolson, 2003.

———. *Roman Warfare*. London: Cassell, 2000.

———. *The Complete Roman Army*. London: Thames and Hudson, 2003.

Healy, Mark. *Cannae 216 Hannibal Smashes Rome's Army*. Oxford: Osprey Publishing, 2005.

Heggie, Jon. "Rome's War Machine." *National Geographic* (Fall 2011): 30-43.

Keegan, John. *A History of Warfare*. New York: Vintage Books, 1993.

———. *The Book of War*. New York: Penguin Books, 1999.

Livy. "Livy: Perichae 66-70." http://www.livius.org/li-ln/livy/periochae/periochae066.html#67 (accessed May 1, 2014).

Matthew, Christopher Anthony. *On the Wings of Eagles: The Reforms of Gaius Marius and the Creation of Rome's First Profession Soldier*. Cambridge Scholars Publishing, 2010.

McNab, Chris. *The Roman Army*. New York: Metro Books, 2013.

Parker, Geoffrey. *The Cambridge History of Warfare*. New York: Cambridge University Press, 2005.

Pliny the Elder. *The Natural History*. London: Taylor and Francis, 1855. E-Book.

Richardson, J. S. *Appian Wars of the Romans in Iberia*. England: Aris and Phillips, 2000.

Sampson, Gareth C. *The Crisis of Rome: The Jugurthine and Northern Wars and the Rise of Marius*. South Yorkshire: Pen and Sword, 2010.

Sekunda, Nick, Simon Northwood, and Richard Hook. *Early Roman Armies*. London: Osprey Publishing, 1995.

Van der Veen, Vincent. "Roman Ownership Inscriptions, 'Keep your grubby paws of my stuff.'" *Ancient Warfare Magazine* 7, no. 2: 40-46.

Wells, Peter S. *The Battle That Stopped Rome*. New York: Norton and Company, 2004.